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**COUNTY BOROUGH OF ST. HELENS.**



# **Annual Report**

ON THE

**Health and Sanitary Circumstances  
of the Borough**

**FOR THE YEAR 1917,**

—BY—

**JOSEPH CATES,**

**M.D., Lond., D.P.H., Camb.**

**Medical Officer of Health,**

**School Medical Officer.**


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**St. Helens:**

**WESTWORTH & SONS, PRINTERS AND STATIONERS, LOWE STREET.**

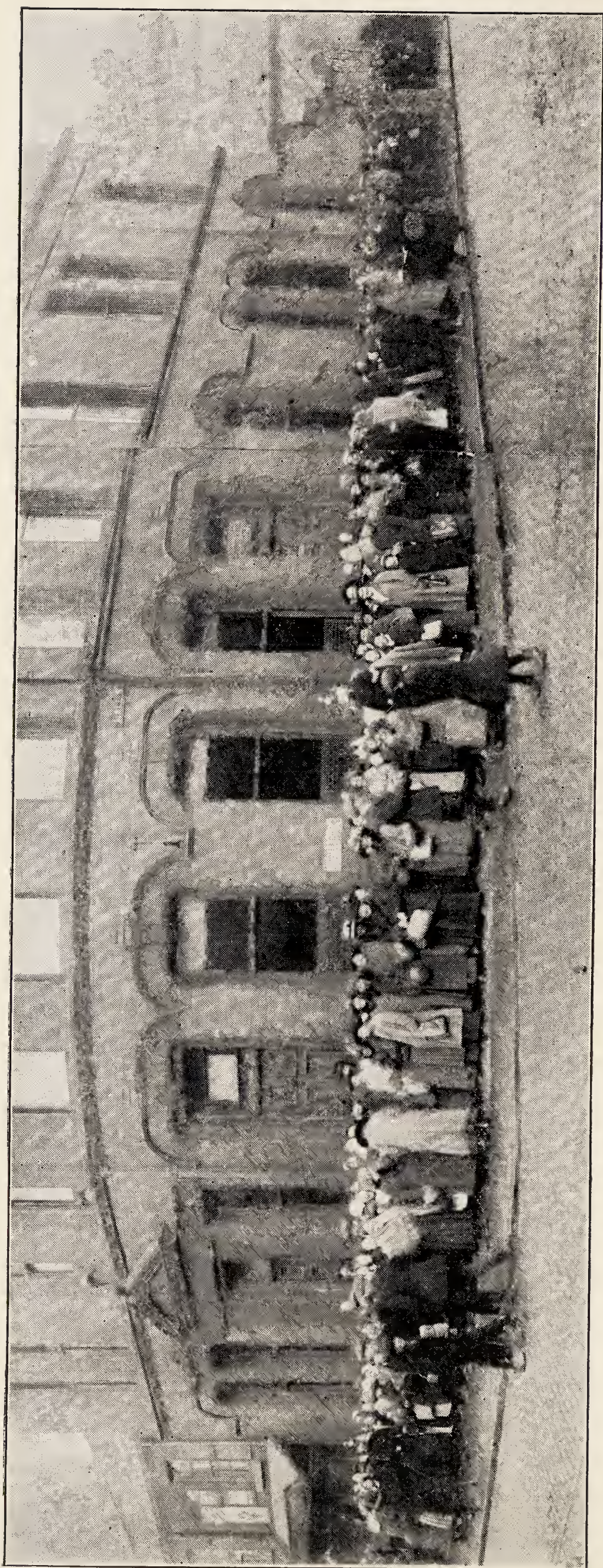
**1918.**





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A sign of the times.

The submarine menace.

# COUNTY BOROUGH OF ST. HELENS.



45TH

# Annual Report

OF THE

## Medical Officer of Health.

—BY—

JOSEPH CATES, M.D., State Medicine, B.S., (Lond).  
D.P.H. (Camb).

Medical Officer of Health, Chief Tuberculosis Officer, School Medical Officer, and Medical Superintendent of the Corporation Hospitals, County Borough of St. Helens; Fellow of the Royal Society of Medicine and Member of the Epidemiological Section, Fellow of the Society of Medical Officers of Health, and of the Royal Sanitary Institute, Formerly Demonstrator of Public Health at King's College, University of London, Assistant Medical Officer of Health to the County Borough of Coventry, Medical Officer of Health and School Medical Officer to the Borough and Port of Lancaster.

**1917.**

St. Helens:

WESTWORTH & SONS, PRINTERS AND STATIONERS, LOWE STREET.

1918.

# HEALTH COMMITTEE.

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THE RIGHT WORSHIPFUL THE MAYOR  
(ALDERMAN H. B. BATES, L.S.A., J.P.), *Chairman*.

ALDERMAN J. FORSTER, J.P., *Deputy-Chairman*.

ALDERMAN H. H. PEET.

ALDERMAN J. PHYTHIAN.

COUNCILLOR T. ABBOTT.

COUNCILLOR J. A. BARON.

COUNCILLOR R. ELLISON.

COUNCILLOR W. FORSHAW, J.P.

COUNCILLOR J. H. FOX.

COUNCILLOR T. HAMBLETT, J.P.

COUNCILLOR R. JACKSON, M.B.

COUNCILLOR E. W. SWIFT.

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## SUB-COMMITTEES

### HOSPITALS.

THE RIGHT WORSHIPFUL THE MAYOR.

ALDERMAN J. FORSTER, J.P.

ALDERMAN J. PHYTHIAN.

COUNCILLOR R. JACKSON, M.B.

COUNCILLOR T. ABBOTT.

COUNCILLOR W. FORSHAW, J.P.

COUNCILLOR T. HAMBLETT, J.P.

### SANITARY.

THE RIGHT WORSHIPFUL THE MAYOR.

ALDERMAN J. FORSTER, J.P.

COUNCILLOR J. A. BARON.

COUNCILLOR R. ELLISON.

COUNCILLOR J. H. FOX.

COUNCILLOR T. HAMBLETT, J.P.

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### TUBERCULOSIS (*Consultative*).

THE RIGHT WORSHIPFUL THE MAYOR.

ALDERMAN H. H. PEET.

ALDERMAN J. PHYTHIAN.

COUNCILLOR T. ABBOTT.

COUNCILLOR J. A. BARON.

COUNCILLOR J. H. FOX.

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### HOUSING.

THE RIGHT WORSHIPFUL THE MAYOR.

ALDERMAN J. FORSTER, J.P.

COUNCILLOR T. ABBOTT.

COUNCILLOR W. A. BROOKE.

COUNCILLOR R. ELLISON.

COUNCILLOR W. FORSHAW, J.P.

COUNCILLOR T. HAMBLETT, J.P.

# EDUCATION COMMITTEE.

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COUNCILLOR J. HEATON, J.P, .....*Chairman.*

ALDERMAN C. J. BISHOP, J.P. ....*Deputy-Chairman.*

and the whole of the Members of the Council,

with the following co-opted Members :—

MRS. M. J. HAMMILL.

SIR D. GAMBLE, Bart.

MRS R. PILKINGTON.

MR. R. A. PILKINGTON,

MR. J. E. C. ELSE, J.P.

MR. L. E. PILKINGTON, (Lancashire County

MR. K. FORBES, (Liverpool University Representative) Council Representative).

MR. J. FRODSHAM.

MR. G. STRINGFELLOW, J.P.

MR. J. ROBINSON, J.P.

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## SUB-COMMITTEE.

### *CENTRAL CHILDREN'S CARE COMMITTEE.*

COUNCILLOR R. JACKSON, M.B. ....*Chairman.*

COUNCILLOR T. HAMBLETT, J.P. ....*Deputy-Chairman.*

THE RIGHT WORSHIPFUL THE MAYOR.

COUNCILLOR W. COLLIER.

ALDERMAN C. J. BISHOP, J.P.

COUNCILLOR W. FORSHAW, J.P.

ALDERMAN A. J. FOOTE, J.P.

COUNCILLOR P. GLYNN.

ALDERMAN J. FORSTER, J.P.

COUNCILLOR P. PHYTHIAN, J.P.

ALDERMAN H. MARTIN, J.P.

COUNCILLOR G. P. VARLEY.

ALDERMAN H. H. PEET.

COUNCILLOR W. WOODCOCK

COUNCILLOR T. ABBOTT.

AND

MRS. M. J. HAMMILL

MRS. R. PILKINGTON

SIR DAVID GAMBLE.

# STAFF

## OF THE MEDICAL OFFICER'S DEPARTMENT.

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JOSEPH CATES, M.D., B.S. (Lond.), D.P.H. (Camb.)

Medical Officer of Health, Chief Tuberculosis Officer, Medical  
Officer of the Education Committee, and Medical Superin-  
tendent of the Corporation Hospitals.

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S. J. C. HOLDEN, M.B., D.P.H. ¶

Deputy Medical Officer of Health and Tuberculosis Officer.

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FRANK HAUXWELL, M.B., D.P.H. ¶

Assistant Medical Officer of Health.

C. W. GEE, L.R.C.P. & S. (Ed.), D.P.H.

Assistant Medical Officer of Health.

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R. BARON, L.D.S. ¶

.. .. School Dental Surgeon.

J. R. TOWNEND

.. .. Temporary School Dental Surgeon.

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W. J. MILLIGAN, (1) ¶ .. .. Chief Inspector of Nuisances.

J. ALMOND (1), (4), (6) ¶ .. .. District Inspector.

H. BROWN, (1), (4), (5), (6) ¶ .. .. District Inspector.

H. LOWE, (4), (6) ¶ .. .. District Inspector.

J. SKEATH, (4) ¶ .. .. Drainage and Shops Inspector.

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R. SHEPHERD .. .. Conversions Inspector.

R. J. JACKSON (1), (5), (6) .. .. } Temporary

G. E. TAYLOR (1) (5) .. .. } District

C. WHITELEY, (1), (5) .. .. } Inspectors.

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T. BLASHILL, (1), (5) .. .. Superintendent of the Public  
Abattoir.

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H. MYERS ¶ .. .. } Disinfectors.  
H. RIDGWAY \* .. .. }

MARY E. HATTON .. .. Temporary Disinfectors.

J. PETTY .. .. Assistant Disinfectors

H. SIMCOX ¶ .. .. } Motor Ambulance Drivers.  
P. McDERMOTT ¶ .. .. }

SARAH BOULTON .. .. } Temporary Motor Ambulance Drivers.  
MARY E. INNES .. .. }

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F. ABBOTT.. .. } Hospital Porters.  
E. WOODS .. .. }

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EDITH CARDER (8) .. .. Matron of the Corporation Hospitals.

MARTHA BLANCHARD, (3), (8), (2)	..	} Health Visitors, School Nurses, Tuberculosis Nurses, and Inspectors of Midwives.
ETHEL DENMAN, (1), (3), (8) (2)	..	
FLORENCE FLETCHER, (3), (8)	..	
JEANNIE GRIME, (1), (2), (3), (8)	..	
ARIANWEN HUGHES, (3), (8)	..	
ESTHER A. JOLLEY (8), (3), (2)	..	
GRACE MACCLELLAND, (2), (3), (8)	..	
ADA ROGERSON, (2), (3)	..	
ANNIE STABLEFORD, (2), (3), (8)	..	
FLORENCE V. THOMAS (3), (8), (2)	..	
HANNAH WEIR (1), (3), (8)	..	
NORAH WICKENS (2), (3), (8)	..	

MARY LAWRIE .. ..	..	} Assistants at the Maternity Centres.
GLADYS THISTLETHWAYTE	..	
ANNIE WORSLEY .. ..	..	
EVELYN COWEN .. ..	..	
BESSIE LAWRIE .. ..	..	
MARY GLYNN .. ..	..	

THOMAS G. ELLIS ¶	..	.. Chief Clerk.
FLORENCE RUSSELL	..	.. Temporary Chief Clerk.
HENRY CASSELL	..	.. Clerk Dispenser.
GERTRUDE ROBINSON	..	.. Correspondence Clerk.
ARTHUR HARRISON ¶	..	.. Third Class Clerk.
FRED THOMAS ¶	..	.. "
THOMAS HOWARD ¶	..	.. Junior Clerk.
JOSEPH HELSBY ¶	..	.. "
W. FINCH ..	..	.. "
EDITH TALBOT	..	} Office Girls.
ALICE DUNGEY	..	
BETTY HOWARTH	..	
DORIS ALCOCK	..	
TERESA BAINES	..	

*The following are part time officers—*

G. H. COOK, M.B., M.R.C.S., L.R.C.P.	..	..	..	.. Surgeon for the Throat and Nose Depart- ment, School Clinic.
J. REID, M.B., Ch.B.	..	..	..	.. Anæsthetist at the School Clinic.
A. GRAHAM, M.B., C.M. (Glas.)	..	..	..	.. Ophthalmic Surgeon at the School Clinic.
F. J. KNOWLES, M.R.C.S., L.R.C.P.	..	..	..	.. Physician to the X-ray Department at the School Clinic and Tuberculosis Dispen- sary.
H. E. DAVIES, M.A., B.Sc., F.I.C.	..	..	..	.. Public Analyst.
W. G. DIXON, M.R.C.V.S.	..	..	..	.. Veterinary Inspector.

(\*) *Discharged from the Army.*

(¶) *On active service.*

(1) *Sanitary Inspector's Certificate of the Royal Sanitary Institute.*

(2) *Health Visitor's Certificate of the Royal Sanitary Institute.*

(3) *Certificate of the Central Midwives Board.*

(4) *Sanitary Inspector's Certificate of Liverpool University.*

(5) *Certificate for Meat Inspection of the Royal Sanitary Institute.*

(6) *Certificate for Meat Inspection of Liverpool University.*

(7) *Certificate for Building Construction (advanced) Board of Education.*

(8) *A trained Nurse.*

## PREFACE.

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### TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to present the following report which deals with the health and sanitary circumstances of the borough for the year ending 31st December, 1917, and briefly reviews the work carried out under the direction of your medical officer.

#### POPULATION.

It is estimated that the civil population of the borough for the year 1917 was 90,600, and that the total population including those on military and naval service was 101,000.

#### MORTALITY.

The general death-rate was slightly less than that of the preceding year; but still in excess of the rate for the whole of England and Wales. So long as the inhabitants of the borough are permitted to occupy dwellings injurious to their health an abnormally high death-rate will prevail in the district.

#### SANITATION.

Owing to the war practically no action has been taken under the provisions of the Housing Acts, and property generally is falling into a condition of disrepair.

#### INFECTIOUS DISEASES.

The accommodation at the Corporation Hospital at Peasley Cross inadequate in non-epidemic periods was totally insufficient to meet the demand occasioned by the continuance of diphtheria and scarlet fever for the third successive year.

The usual biennial outbreak of measles began in the second quarter of 1917, and continued for about 12 months. The disease in the beginning was moderately mild in type, but in the autumn and winter became severe. During 1917, 4628 cases of measles were known to the department, every patient notified to the medical officer of health was visited and home nursing was provided by the Council in 711 instances. Efficient nursing can undoubtedly prevent the occurrence of complications in measles, and there appears every reason to believe that the extremely low death-rate of 1.4 per cent. during the epidemic can be attributed in part to the systematic employment of trained nurses in the homes.

Typhoid and cerebro-spinal fevers were almost absent from the borough. No case of small pox occurred.

#### MATERNITY AND CHILD WELFARE.

During the year under review important progress was made in this branch of public health work. The success achieved by the centre established in Parade Street lead to the opening of centres at Marshalls Cross and in Oxford Street. A total of 10,247 attendances were made by mothers and infants to these centres during 1917, and 152 patients were taken into the Corporation Hospitals.

In my annual report for 1914 reference was made to the value of dried milk as a food for infants. Experience since that time has confirmed the opinion expressed.

In 1914 1202 lbs. of milk powder were distributed from the Corporation depot, in 1917 the amount had increased to 13,832 lbs. The facilities provided by the depot insured the food supply of a large proportion of artificially fed infants, and many young children during the ordeal through which the country has been passing.

#### NEEDS OF THE DISTRICT.

There are five directions in which action must be taken if the health of the district is to be improved :—

The provision of houses for the working class and the closing and clearance of certain insanitary areas.

The provision of adequate hospital accommodation for maternity and for infectious diseases.

The conversion of the pail closets and privies now in use. ]

The abolition of the bricked ashplaces and the provision of closed ashbins

The paving of yards.

#### STAFF.

It gives me pleasure to refer to the manner in which the members of my staff have carried out their duties. The efficient working of the department is dependant on the willing and loyal service of its members.

I am, Gentlemen,

Your obedient servant,

JOSEPH CATES.

*July, 1918.*

## SUMMARY OF VITAL STATISTICS FOR 1917.

	St. Helens.	England and Wales.
<hr/>		
TOTAL POPULATION—Estimated to the middle of the year— ... ..	101,000	
ESTIMATED CIVIL POPULATION ... ..	90,600	
<hr/>		
Number of persons married ... ..	536	516,720
Annual rate of persons married per 1,000 of the total population ... ..	10.60	13.8
<hr/>		
BIRTHS ... ..	2,217	668,340
Annual rate of births per 1,000 of the total population	21.9	17.8
<hr/>		
DEATHS ... ..	1,498	498,955
Annual rate of mortality per 1,000 of the civil population ... ..	16.53	14.4
Infant mortality rate per 1,000 births ... ..	123.7	97
Death-rate from diarrhoea of children under two years of age, per 1,000 births ... ..	11.2	12.18

# **ANNUAL REPORT**

## **ON THE HEALTH AND SANITARY CIRCUMSTANCES OF THE BOROUGH FOR THE YEAR 1917.**

St. Helens is situated in the south-west of Lancashire, about ten miles north-east of Liverpool and twenty miles west of Manchester. The coast is nearest at Seaforth, a town at the mouth of the Mersey, twelve miles west of the borough.

The line of the borough boundary is roughly the circumference of a circle, the centre being at Peasley Cross, and the radius a distance of about two miles.

The area is approximately 7,285 acres: the rateable value on the 31st March, 1917, was £389,292. A penny rate under Section 211 of the Public Health Act, 1875, is estimated to yield £1,490.

On the north-east are the urban districts of Haydock and Ashton-in-Makerfield, and the rural district of Warrington. With these exceptions, the borough is bounded by the Whiston rural area.

From the south-west corner of the borough, about 270 feet above sea-level, the ground slopes gradually towards a belt of low-lying land extending from east to west across the district, and traversed by small streams which unite in the eastern part of the area to form the Sankey brook. One of these watercourses, known as Windle brook, passes through the centre of the thickly populated, north-western division of the borough. It appears that the older portions of the town were built along the banks of this stream. The land in the northern part of the borough also inclines towards the Windle brook.

Between St. Helens and the coast, the land generally is low-lying and is used for agricultural purposes.

The borough is divided into nine wards. Table 1, on page 30, shows the position, acreage, estimated population for 1915, and density of each ward calculated on the approximate area built upon.

## METEOROLOGY.

At the Corporation Observatory in Victoria Park, readings are taken once a day, at 9 a.m.

Table 2 shows the annual rainfall in St. Helens since 1889.

The weekly record of readings taken at the Observatory during the year is given in table 3.

## POPULATION.

The estimated total population of the borough at the middle of 1917 was 101,000. According to the figures revealed by the National Registration Act the civil population was estimated to be 90,600. Tables 4 and 5 give the number of inhabitants of the borough and of each ward as shown by the census returns of 1911.

The age and sex distribution of the population at the time of the last census is set out in table 6.

Table 7 on page 34 gives the number of persons resident in the various institutions of the borough at the census period 1911, and also the figures for 1917.

An inquiry was carried out during Dec., 1917, respecting the number of unoccupied buildings in the borough, the figures are shown in table 8.

## POOR LAW AND OTHER FORMS OF RELIEF.

The amount of out-door relief in money and kind supplied by the Guardians during the year ending the 30th September, 1917, to persons resident within the borough, and chargeable to the Union was £6,763/11/2.

It has been found impossible to obtain figures showing the amount of pauperism in the borough for a series of years, as the statistics are not prepared by the Poor Law Authorities for separate sanitary districts, but for the whole Union, which comprises nineteen townships.

The local branch of the Charity Organization Society did not afford assistance to applicants during 1917.

A Police Aided scheme to provide clothing for destitute children is in existence in the borough. As a result of useful work carried out during the past year, 576 children received foot-gear and clothing, 1,562 articles being distributed.

Free meals to the number of 44,525 were provided by the local Education Authority for children selected from a school population of 20,097.

#### MEDICAL AND SURGICAL ASSISTANCE.

There are two general hospitals in St. Helens, containing 377 beds for the relief of those residing within the borough and the surrounding district. During the year, 2,121 in-patients and 872 out-patients received treatment, and 431 wounded soldiers were taken into hospital. Neither institution accepts maternity cases or patients suffering from venereal diseases. There are no resident medical officers. Patients are expected to pay for a medical practitioner. Admission to the St. Helens Hospital is limited to penny-a-week subscribers and their wives and children.

Accommodation is provided by the Corporation at the borough hospitals for persons suffering from scarlet fever, diphtheria, enteric fever, smallpox, tuberculosis and certain other diseases. Maternity and child welfare cases are also admitted.

A voluntary Association for the aid of crippled children has rendered valuable help during the year to 80 patients, by the provision of apparatus, spinal carriages, and hospital treatment.

A Fresh-Air Fund sent 38 children to convalescent homes for a period of at least three weeks, and also provided in other ways for a large number of cases.

The Education Authority contributed £661 - 9 - 8 towards the maintenance of children at surgical homes and other institutions.

A Nursing Association, by means of voluntary contributions, maintains a superintendent and seven nurses to attend suitable cases in their own homes, except those residing in an outlying area. One thousand and thirty-eight new cases and 128 old cases were nursed during the year, the total number of visits amounting to 27,300.

#### WATER SUPPLY.

The Council supply water to the district under the provisions of the St. Helens Improvement Act, 1869, and the St. Helens Water Act, 1882.

Water is obtained from deep wells in the new red sandstone. There are six pumping stations. A portion of the water is pumped to a central reservoir, and before being distributed is softened by a liming process, the verage hardness before and after softening being, according to Clark's

scale,  $22.1^{\circ}$  and  $10.8^{\circ}$  respectively. During the year ending the 31st December, 1917, 1,557,842,867 gallons were used, 1,119,416,347 for domestic supply, and 438,426,520 for trade purposes. The vast majority of houses in the borough are supplied from the Corporation mains. The supply is constant, and in periods of prolonged drought has proved sufficient. A few farms and cottages are still supplied from shallow wells.

Chemical and bacteriological analyses are carried out at regular intervals. There is no evidence of metallic or other contamination.

### RIVERS AND STREAMS.

The Sankey brook, formed by the union of Windle, Sutton and Rainford brooks together with several small watercourses, passes through the north-eastern quarter of the borough, closely following the course of the St. Helens Canal. It receives the effluent from the Corporation sewage works and also an amount of untreated sewage. Trade effluent from various works passes into the brook, which is considerably polluted.

### DRAINAGE AND SEWAGE.

Drains are laid in practically the whole of the populous portions of the borough. There is separation of sewage and storm water in the Denton's Green and Newtown areas, surface and storm water being turned into Windle brook. In the outlying districts a number of houses have been built in a situation remote from a sewer. About three-quarters of the sewage of the borough is treated at the Parr sewage works by liming and sedimentation; the effluent, varying greatly in composition, is discharged into the Sankey brook. The remainder of the sewage is turned, untreated, into the same watercourse. The bulk of the material collected from the conservancy system is treated at a depot in Parr. A portion of the substance obtained from privy middens is sold to farmers.

### CLOSET ACCOMMODATION.

Tables 9 and 10 show the estimated number of houses with the various types of sanitary conveniences existent in the borough each year since 1907, and the number of conversions completed since 1904. Owing to the war there has been a considerable diminution in the number of conversions carried out.

### PUBLIC CONVENIENCES.

There are fifteen of these situated in various parts of the town. Eleven are modern structures, but in only one instance is there water closet accom-

modation. Additional provision is urgently needed, both as regards closets and also urinals for women.

## PUBLIC BATHS.

These are situated in Boundary Road. The total number of baths used during the year was 171,308, being 95,050 plunge baths, 21,848 slipper baths, 64 vapour baths, and 54,346 baths were provided free for soldiers.

## REMOVAL OF HOUSE REFUSE.

Removal of house refuse, and the emptying of tub and pail closets and privy middens are undertaken by the Corporation. The removal of the contents of privy middens is carried out about three times a year, and at less infrequent intervals on request. Pail closets and ashplaces are emptied about once a week. Fish refuse and other material liable readily to decompose are taken away weekly. Bricked ashpits and ashplaces with wooden doors are common in the borough. The conversion of these to moveable wall bins of the tippler type is slowly being proceeded with, 125 were converted during the year. In new houses moveable bins are generally provided.

About three-quarters of the house and trade dry refuse is treated at a destructor in Boundary Road. During 1917, 10,917 tons were destroyed. The actual cost of labour per ton for destruction only was 2s. 7½d., and the approximate allowance for the sale of steam amounted to £566.

The remainder of the house refuse is tipped at Parr.

The general condition of the streets, passages and footpaths is unsatisfactory and in some areas of the town extremely insanitary.

## SCAVENGING.

Street sweeping is carried out by the Corporation. The state of the paving, in many of the streets, renders the work difficult. The main streets are cleansed about twice a week, the side streets and passages about once a week. The cleansing and sweeping of footpaths adjoining dwellings is the duty of occupiers, and is generally neglected.

## SANITARY INSPECTIONS OF THE DISTRICT.

The total number of visits made during the year was 7,564.

Table 11 contains a list of notices served during 1917, and a record of previous years.

### CHOKED DRAINS.

When it is discovered that a drain is choked an officer of the department attempts to remove the obstruction before a notice is served on the owner or occupier. During the year, 664 drains were plunged, and in 297 instances the obstruction was removed.

### CLEANSING OF PREMISES.

A whitewash brush and a supply of lime were provided for the use of 473 persons unable to pay for the necessary cleaning of their houses. Twelve tons of lime being distributed and three tons of disinfectant.

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## ***PREMISES AND OCCUPATIONS CONTROLLED BY BYE-LAWS OR REGULATIONS.***

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### COMMON LODGING HOUSES.

There were in the borough at the beginning of the year, five common lodging houses registered for the reception of 219 lodgers.

During 98 inspections eleven infringements of byelaws were discovered.

### HOUSES LET IN LODGINGS.

There were five houses on the register at the commencement of the year, but there are a large number of houses illegally used as houses let-in lodgings. The houses are on the whole only moderately well kept. Thirty-four inspections were made, and ten notices were served.

### BAKEHOUSES.

There are 113 of these on the register ; one is underground. Mechanical power is used in seventeen instances. Thirteen defects were discovered during the year, and after notice twelve were remedied.

There is room for considerable improvement both in the sanitation of the premises and in the standard of cleanliness observed.

### CANAL BOATS.

One boat was inspected, and was found not to be registered. No instance of infectious disease was discovered. One infringement of the Acts was detected. Further details of the work are given in table 57.

## OFFENSIVE TRADES.

At least nine offensive trades are carried on within the borough. There are five tripe dealers, a manure manufacturer, a fat melter, a bone boiler, and a gut scraper. In many cases the premises are structurally unsuitable.

## CELLAR DWELLINGS.

No instance was discovered of the use of an underground room as a dwelling.

## SMOKE NUISANCE.

At the beginning of the year an enquiry was commenced under the auspices of the Committee for the Investigation of Atmospheric Pollution.

When the atmosphere of a district is polluted by the imperfect combustion of coal, an indication of the extent of the pollution can be obtained by collecting rain water and estimating the amount of soot and tarry matter therein.

A suitable apparatus was placed in a central position in the town, and an analysis of the sample collected each month was carried out by the public analyst.

The results of the enquiry and figures relating to similar investigations in other towns are set out in table 12. Briefly it is shown that approximately a ton of soot per acre was deposited during the year in the centre of the town.

It is more than likely that the prevalence of respiratory diseases in St. Helens is connected with the heavy pollution of the air.

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## **FOOD SUPPLY.**

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## COWKEEPERS AND COWSHEDS.

Twenty-six persons are registered as cowkeepers. There are about 170 cows kept for dairy purposes within the district. The animals are inspected four times a year by a veterinary surgeon appointed by the Committee. Ten defects in the cowsheds were reported during 1917. A considerably higher standard of cleanliness might be observed both in the methods of milking and in the state of the sheds, and insufficient use is made of the means of ventilation provided.

## MILK SHOPS.

During 1917, two milk shop dealers were added to the register, and two removed, 126 remaining on the register at the end of the year.

Although the Committee now insist that milk sold from shops shall be stored in special receptacles, yet there can be little doubt that the risk of contamination in certain cases is considerable. General dealers should not be permitted to sell milk.

## MILK.

No systematic bacteriological examination has been made of milk sold within the borough.

## MEAT.

A municipal abattoir is in a central position and has in connection with it cold air stores. 4,967 beasts, 633 calves, 4,216 sheep and 3,858 pigs were killed in the public slaughter house during the year. No utilisation is made of the offal or other waste products. Five private slaughter-houses still remain in the borough, and are without exception unsuitable and generally insanitary. Four are licensed for the slaughter of cattle and pigs, and one for pigs only. The private slaughter-houses are regularly visited by the inspectors, frequent visits being paid when slaughtering is expected to occur. The licensee of each private slaughter-house keeps a register of animals slaughtered and makes a weekly return to the medical officer of health. An inspection of meat exposed for sale is regularly carried out. The number of animals killed in the private slaughter houses during the year were 107 beasts, 1,232 sheep, 1,996 pigs.

Table 13 shows the number of animals found on slaughter to be diseased, and the approximate weights of meats condemned at the abattoir and at the private slaughter-houses.

## FOOD POISONING.

No definite epidemic of food poisoning occurred in the borough during 1917, but it is almost certain that the majority of the 37 deaths which occurred from diarrhoea and enteritis can be directly attributed to infected food.

## SALE OF FOOD AND DRUGS ACTS.

### MILK.

Thirty informal samples were purchased, twelve were found to be adulterated; 472 formal samples were taken, and 45 were adulterated or

otherwise tampered with. Two formal samples were found to contain an excessive amount of dirt. Proceedings against the farmer were pending at the end of the year.

Table 14 shows the results of the analyses of milk samples, and the magisterial proceedings are set out in table 55.

## PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

These regulations prohibit the addition of any preservative substance to milk intended for human consumption. Only cream containing 35 per cent. or more of fat may be preserved, and then only by certain substances, the nature and amount of which must be stated on a label. No preservative was discovered in the samples of milk examined. No samples of preserved cream were analysed. No instances of an infringement of the requirements as to labelling were detected.

### OTHER FOOD.

The number and nature of samples taken during the year are given on table 15.

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## **HOUSING.**

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Owing to the war practically no notices have been served under the provisions of the Housing and Town Planning Act, 1909, and under section 141 of St. Helens Improvement Act, 1869.

A large number of closing orders and orders for demolition made by the Council are still in operation, but the houses are occupied and no steps have been taken to remedy the defects there existent. Since the outbreak of war overcrowding has largely increased.

During 1917 a Closing Order was made in respect of the house No. 1, Sutton Moss. The house was empty at the end of the year and the defects were still existing.

Two houses in a congested area between Hill Street and Victoria Street were demolished by the owners during the carrying out of a conversion scheme.

## **FACTORY AND WORKSHOPS ACT.**

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### **FACTORIES.**

The inspection of these is in the hands of a factory inspector appointed by the Home Office. Any act, neglect, or default which can be dealt with under the Public Health Acts is referred to the Local Authority. Table 16 gives a list of matters so referred during 1917 ; the necessary alteration with one exception had been carried out at the end of the year.

### **WORKSHOPS.**

The number of workshops registered is 306. These were visited on 206 occasions and as a result the defects shown in table 17 were discovered and in due course remedied.

### **WORKPLACES.**

Nineteen workplaces are registered, the trades carried on being in one instance that of a plumber, in eight a joiner, in three a wheelwright, in three a smith, and in two a mason. Two cab-yards are registered.

Several of the workshops and workplaces were closed temporarily owing to the war.

### **BAKEHOUSES.**

Reference to these will be found on page 14.

### **OUTWORKERS.**

Occupiers of factories, workshops, or any place from which work of certain kinds is given out are compelled to keep a list of outworkers employed by them, and to send a copy of the list to the Local Authority on or before the 1st February and August in each year. Eight lists referring to ten persons were made out by employers during the year. None of the lists was sent in by the required dates. The outworkers were visited on 20 occasions ; the surroundings under which the work was being done were found on the whole to be satisfactory.

Tables 18 to 22 furnish the returns annually required by the Home Office.

## **SANITARY ADMINISTRATION.**

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### **CORPORATION HOSPITALS.**

#### **PEASLEY CROSS HOSPITAL.**

The borough isolation hospital at Peasley Cross was erected to provide accommodation for 92 patients. Cases of scarlet fever, diphtheria, typhoid fever, erysipelas, puerperal fever, and when necessary other diseases are admitted. Tables 23, 25 and 26 show the number of patients treated in the institution during the year, and the duration of treatment.

#### **OLD WHINT HOSPITAL.**

The small pox hospital is situated at Old Whint. Thirty-six patients can be isolated. The hospital has been fully occupied by maternity and child welfare cases. Table 24 gives number of patients treated.

#### **ECCLESTON HALL SANATORIUM.**

This institution has been fully used during 1917. Table 42 gives a record of admission and the condition of the patients on discharge.

A total of 19,632 days institutional treatment was provided, 8,915 being for insured persons, and 821 attendances were made by them to the dispensary.

The proportion of notified cases of infectious diseases removed to hospital is given in table 28.

The staff on duty in the hospitals at the end of December consisted of a matron, six sisters, fourteen staff nurses, one temporary nurse, 26 probationers, 42 domestic servants, and eight men.

### **DISINFECTING STATION.**

The disinfection station is situated at the Peasley Cross hospital. Visits to 1,264 houses were made for the removal of clothing and bedding for disinfection by steam. A list of the articles disinfected is given in table 31.

Infected rooms are now sprayed with a solution of formalin and closed for four hours. During the year 5,411 rooms were disinfected.

### **AMBULANCE STATION.**

A motor ambulance is kept at the Peasley Cross hospital, to convey patients to either of the Corporation hospitals. During the year, the total distance covered was 14,340 miles. A motor van was also in use and completed about 7,000 miles.

## PUBLIC MORTUARY.

This is situated at the rear of the town hall and consists of a brick building containing two rooms.

Thirty-five bodies have been placed in the mortuary during the year, and twelve post-mortem examinations were conducted.

## ADMINISTRATION OF LOCAL OR ADOPTIVE ACTS.

Reference to this subject was made in the annual report for 1914.

## CHEMICAL AND BACTERIOLOGICAL LABORATORY.

A well-equipped laboratory is provided at the town hall. Examination of material from suspected cases of disease is carried out free of charge. The Council now provide facilities for the diagnosis of cases of venereal disease, including the Wassermann reaction for syphilis.

The numbers of specimens examined during the year are shown in table 32.

Anti-toxins are provided free for persons suffering from diphtheria and other diseases. The total amount used during the year was 4,464,000 units. The outbreak of diphtheria enormously increased the bacteriological work.

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# ***PREVENTION OF AND CONTROL OVER INFECTIOUS DISEASE.***

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The means adopted in the borough to control the spread of infectious disease do not differ in any important detail from those given in the annual report for 1914.

## SMALLPOX.

No instance of this infection was notified during the year.

The number of cases notified and the number of deaths occurring from smallpox in the borough since 1873 are given in table 47.

Although the town has been comparatively free from the disease for several years, it is to be feared that the increasing number of the population unprotected by vaccination will afford suitable material for an extensive epidemic. Table 33 shows the extent of vaccination in St. Helens since 1897.

### ACUTE POLIOMYELITIS AND CEREBRO-SPINAL FEVER.

Four cases of acute poliomyelitis were notified during the year, but no deaths were reported to be due to the disease. There was one case of cerebro-spinal fever.

### DIPHTHERIA AND MEMBRANEOUS CROUP.

During the year, 538 cases with 79 deaths have been reported, giving an attack rate of 5·3 and a death rate of 0·87 per thousand of the population. Table 35 sets out the record for previous years.

The number of cases removed to hospital was 518, or 96·4 per cent of the total cases notified. Table 34 gives a classification of the cases and the deaths according to the age of the patients.

Arrangements were made for the routine bacteriological examinations of the nose and throat of all persons living in the house from which a case of diphtheria was notified. In all 7,766 specimens were taken, mainly by the health visitors, and examined during the year, and of this number 600 showed the presence of the organism causing diphtheria. Fifty-two "carrier" cases were discovered and isolated either at home or in hospital, the patients were treated with diphtheria anti-toxin and local applications of antiseptics.

School children attending classes in which diphtheria had occurred were subject to routine swabbing of the throat.

### ERYSIPELAS.

Ninety-six cases were notified and two deaths were stated to have taken place from the disease; four cases were removed to the isolation hospital.

### SCARLET FEVER.

During the year, 589 notifications were received, and 20 deaths were reported.

The numbers for previous years are shown in table 35.

The number of cases removed to hospital was 564, or 97·07 per cent. of those notified. Table 37 gives a classification of the cases and deaths at various ages from scarlet fever during the year.

### TYPHOID FEVER.

Eight cases with two deaths were notified during 1917. Ten of the cases notified were removed to hospital. Table 36 gives the record for previous years.

**PUERPERAL FEVER.**

Five women were reported during the year to be suffering from puerperal fever and two deaths were stated to be due to the disease. All the cases notified were removed to hospital. Table 36 gives figures relating to the cases reported in previous years.

**OPHTHALMIA NEONATORUM.**

Forty-eight children were notified as suffering from this disease. Thirty-two of the children were nursed at home, being attended by private practitioners and district nurses, while of the more severe cases sixteen were admitted into the isolation hospital.

**MEASLES.**

The number of cases reported during the year was 4,628, with 65 deaths. Table 35 gives the record for previous years.

The deaths at various ages during 1917 are shown in table 38.

**WHOOPING COUGH.**

Notifications of 631 cases with 19 deaths were received. Table 35 gives a record of the extent of the disease in other years.

**DIARRHŒA AND ENTERITIS.**

During 1917, 37 deaths were attributed to diarrhœa or enteritis, and of these 25 occurred in children under two years, being a death-rate from these diseases of 11·2 per 1,000 births. Table 39 shows the deaths at certain age periods from both diseases.

The figures for other years are given in table 36.

The steps taken to prevent loss of life from these diseases were given in the report for 1915.

**PULMONARY TUBERCULOSIS.**

During the year 208 notifications were received, ten of the cases had been previously notified, 121 deaths from the disease were recorded. Table 36 shows the number of deaths stated to be due to the disease in past years.

Table 40 shows the division into age and sex groups of the primary notifications received.

Fifty-two deaths due to pulmonary tuberculosis occurred in persons concerning whom no notification had been received.

The steps which are taken to prevent the spread of the disease are similar to those set out in the annual report of 1914.

## OTHER FORMS OF TUBERCULOSIS.

Sixty-six notifications were received during 1917. Four of the cases had been previously notified. Forty-two deaths were recorded. Table 36 shows the number of deaths attributed to forms of tuberculosis other than pulmonary since 1873. Up to the present, hospital accommodation has not been generally provided by the Local Authority for instances of non-pulmonary tuberculosis. Table 41 gives the age and sex distribution of the notifications received. Steps similar to those previously detailed are taken to follow up and prevent the spread of infection.

Table 42 gives a record of cases admitted to Eccleston Hall.

## TUBERCULOSIS DISPENSARY.

The tuberculosis dispensary is situated in Claughton Street.

The number of patients attending the dispensary is set out in tables 43 and 44.

The nurses made 242 first visits and 2-456 re-visits to the notified cases.

## VENEREAL DISEASES.

St. Helens was one of the first towns to provide free facilities for the diagnosis of cases of venereal disease, and in 1917 further progress was made.

A complete scheme for the treatment of persons suffering from venereal diseases was approved by the Local Government Board during the year.

Table 30 gives a record of the work carried out.

## INVESTIGATION OF OTHER DISEASES.

### CANCER AND MALIGNANT DISEASE.

Fifty-three deaths during 1917 were stated to be due to cancer and malignant disease.

Table 36 shows the figures for previous years.

### PULMONARY DISEASES OTHER THAN TUBERCULOSIS.

Two hundred and eighty seven deaths were certified to be due to respiratory diseases other than tuberculosis. The number of deaths from these diseases in previous years is shown in table 35.

**DEATHS FROM VIOLENCE.**

The number of deaths which took place from violence was 52. Fifty-two inquests were held and 12 post-mortem examinations carried out.

**UNCERTIFIED CAUSES OF DEATH.**

In no less than 52 instances a death was registered without the cause of death being certified by a medical practitioner.

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***MEANS FOR PREVENTING MORTALITY  
IN CHILDBIRTH AND INFANCY.***

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**SUPERVISING MIDWIVES.**

At the close of 1917, 36 women gave notices of their intention to practice within the borough during the ensuing year. The qualifications of these women were:—Central Midwives Board examination certificate, fourteen; other recognised certificate, thirteen; untrained, nine.

Of the total births occurring in the borough 99 per cent. were attended by midwives. No instance was discovered of a birth being attended by an uncertified midwife.

The number of stillbirths notified during the year was 88, about one-fifth of the correct figure.

Under rules issued by the Central Midwives Board, a midwife must advise that medical assistance shall be obtained in any case where abnormal conditions occur during the confinement or in the lying-in period. Medical assistance was said to be required on 585 occasions.

**THE PREVENTION OF INFANT MORTALITY.**

Complete details of the scheme for maternity and infant welfare work carried on in the borough were given in the annual report for the year 1915, and need not now be re-stated.

The attendance at the maternity centre held in the medical officer's department at the town hall has proved so successful that a second centre was established in the Marshalls Cross district, and a third in Oxford Street.

**ANTE-NATAL.**

The health visitors paid 697 visits to expectant mothers, and it is agreeable to record that almost without exception the visitors were well received. Twenty-six expectant mothers were admitted for treatment into the Corporation hospitals, and expectant mothers made 133 attendances at the centres.

**POST-NATAL.**

The health visitors made 1,936 first visits and 12,594 total visits to infants and young children. Four thousand eight hundred and ninety-nine attendances were made by mothers, and 5215 by infants to the infant welfare centres, and seventeen mothers and 95 children were treated in the Corporation hospitals.

**INFANT MORTALITY.**

During the year there were no less than 279 deaths of infants under one year of age, giving a mortality of 123·7 per thousand births. Table 45 shows the infant death-rate in St. Helens since 1873, and also figures for England and Wales.

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**VITAL STATISTICS.**

The diagram on table 46 illustrates the natural increase of the population—the excess of births over deaths, and in table 47 other important figures are shown.

**BIRTHS.**

The number of births registered during 1917 was 2,227 ; twenty-eight occurring in other districts were transferable to St. Helens, making a total of 2,255. The birth-rate for the year, based on the total population, was 22.3, showing a decrease in the figures for the previous years. The chart on table 48 shows that an alarming decline has occurred in the birth-rate for St. Helens since 1873 ; the rate for St. Helens, however, is still above that for the rest of the country. Table 49 gives the birth-rate in the various wards of the town.

**ILLEGITIMATE BIRTHS.**

There were 78 illegitimate births registered, being 0.79 per thousand of the population. Table 50 shows the proportion of illegitimate births during the past years.

## MARRIAGES.

The number of marriages during the year has been 536, giving a marriage rate (persons married) of 10·60 per thousand of the population. Table 51 shows the rate for past years.

## DEATHS.

The total number of deaths registered as having taken place within the borough during the year was 1,468. Of these 198 were deaths in St. Helens of persons usually resident in other parts; and were transferred by the Registrar General to the districts to which they belonged; 228 deaths of persons usually living within the borough occurred in other places, giving a total of 1,498 as the actual number of deaths to be accepted in estimating the death-rate for the year, and a recorded death-rate of 16·53 per thousand of the estimated civil population. Table 52 gives figures for the borough since 1873.

The death-rates in the different wards for 1917 are set out in table 53.

Figures relating to the causes of and ages at death during the year are given in table 54.

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## ***AN ACCOUNT OF OTHER WORK.***

In addition to the usual monthly statements of births, deaths, and infectious diseases, many special reports have been made to the Committee during the year by the medical officer of health.

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## THE WAR.

For the fourth year a large amount of work directly arising out of the war has been carried out by the medical officer of health and his staff.

A close inspection has been maintained of premises from which food is supplied to the army, enquiry has been made into cases of infectious diseases coming into the borough after discharge from military hospitals. Men suspected to be suffering from tuberculosis have been examined at the request of the recruiting officer, and bacteriological examinations have been conducted in the municipal laboratory.

Soldiers suffering from infectious or contagious diseases have been admitted into the Corporation Hospitals, and the disinfection of billets, bedding and clothing has been carried out.

No official notice of billeting has been forwarded to the medical officer of health.

## Summary of Tables.

Table 1.	Position, acreage, and population of wards	Table 21.	(4) Registered work-shop
„	2. Annual rainfall	„	22. (5) Other matters
„	3. Meteorological returns	„	23. Admissions, discharges, and deaths of St. Helens Patients during 1917, Peasley Cross Isolation Hospital
„	4. Population of St. Helens at census periods	„	24. „ Old Whint
„	5. Population of the wards	„	25. Admissions, discharges, and deaths of Haydock patients during 1917, Peasley Cross Isolation Hospital
„	6. Age and sex distribution of the population	„	26. Number of maternities and child welfare cases treated
„	7. Number of patients and officials in the institutions	„	27. Number of days spent in Hospital by Haydock patients
„	8. Figures showing the number of empty houses	„	28. Percentage of cases of infectious diseases removed to Hospital
„	9. Number of houses with various types of closets	„	29. Maternity cases
„	10. Number of closets converted.	„	30. Venereal diseases
„	11. Number of notices served relating to defects	„	31. List of articles disinfected
„	12. Pollution of atmosphere by smoke	„	32. Number of specimens examined during the year
„	13. Number of animals slaughtered and the amount of meat found diseased.	„	33. Showing the extent of vaccination in the borough
„	14. Results of analyses of samples of milk	„	34. Number of cases of and deaths from diphtheria during 1917, classified according to age
„	15. Results of analyses of other foods	„	35. A chart relating to infectious diseases.
„	16. Defects discovered in factories	„	36. A chart relating to infectious diseases.
„	17. Defects discovered in workshops	„	37. Number of cases of and deaths from scarlet fever during 1917, classified according to age
„	18. Home Office Tables— (1) Inspections		
„	19. (2) Defects found		
„	20. (3) Home work		

Summary of Tables—*Continued.*

Table 38. Number of deaths from measles during 1917, classified according to age

- „ 39. Number of deaths from diarrhœa and enteritis during 1917, classified according to age
- „ 40. Classifications according to age of cases of pulmonary tuberculosis
- „ 41. Classifications according to age of cases of non-pulmonary tuberculosis
- „ 42. A record of cases admitted to Eccleston Hall
- „ 43. Number of patients attending the tuberculosis dispensary
- „ 44. Number of attendances at the tuberculosis dispensary during 1917.
- „ 45. Chart comparing the rate of infant mortality in St. Helens with that of England and Wales
- „ 46. Chart showing the natural increase of the population

Table 47. Statistics for St. Helens since 1873

- „ 48. Chart showing the birth-rate in the borough since 1873.
- „ 49. Birth-rate in the wards
- „ 50. Illegitimate birth-rate
- „ 51. Marriages and marriage-rate
- „ 52. Chart showing the death-rate in the borough since 1873
- „ 53. Death-rate in the wards
- „ 54. Causes of, and ages at, death during 1917, Local Government Board Table 3
- „ 55. A statement of Magisterial proceedings
- „ 56. Number of houses erected
- „ 57. Report under the Canal Boats Acts, 1877 and 1884

**Statistical Tables  
and Charts.**

**Table 1.**

Showing the position of the wards, the acreage, estimated population for 1915, and the density of each, calculated on the approximate area built upon.



The population, acreage, and density of persons in each ward.

WARD.	Population.	Area in acres.	Approximate Acreage unbuilt on.	Persons per Acre built upon.
North Eccleston .....	13,020	235·439	135	130·8
South Eccleston .....	13,030	621·625	448	75·4
Central .....	6,225	94·459	2	67·4
North Windle .....	12,680	697·084	447	51·9
South Windle .....	8,505	67·116	0	127·9
Hardshaw .....	12,030	342·684	160	66·9
East Sutton .....	12,650	1,312·319	1,190	103·9
West Sutton .....	10,960	2,429·151	2,300	85·7
Parr .....	13,100	1,484·550	1,394	145·5

**Table 2.**

**TOTAL RAINFALL IN INCHES IN ST. HELENS SINCE 1890.**

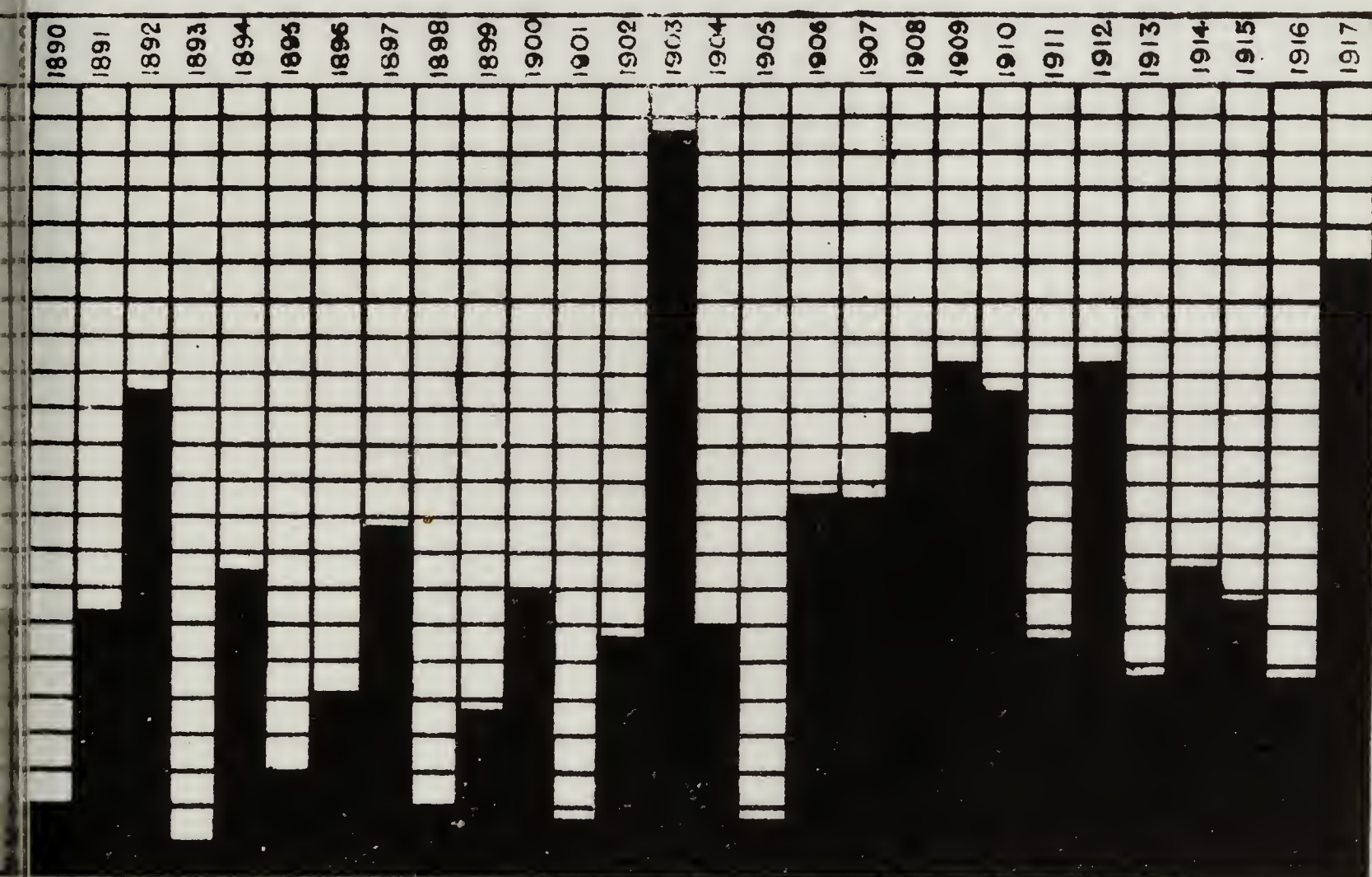
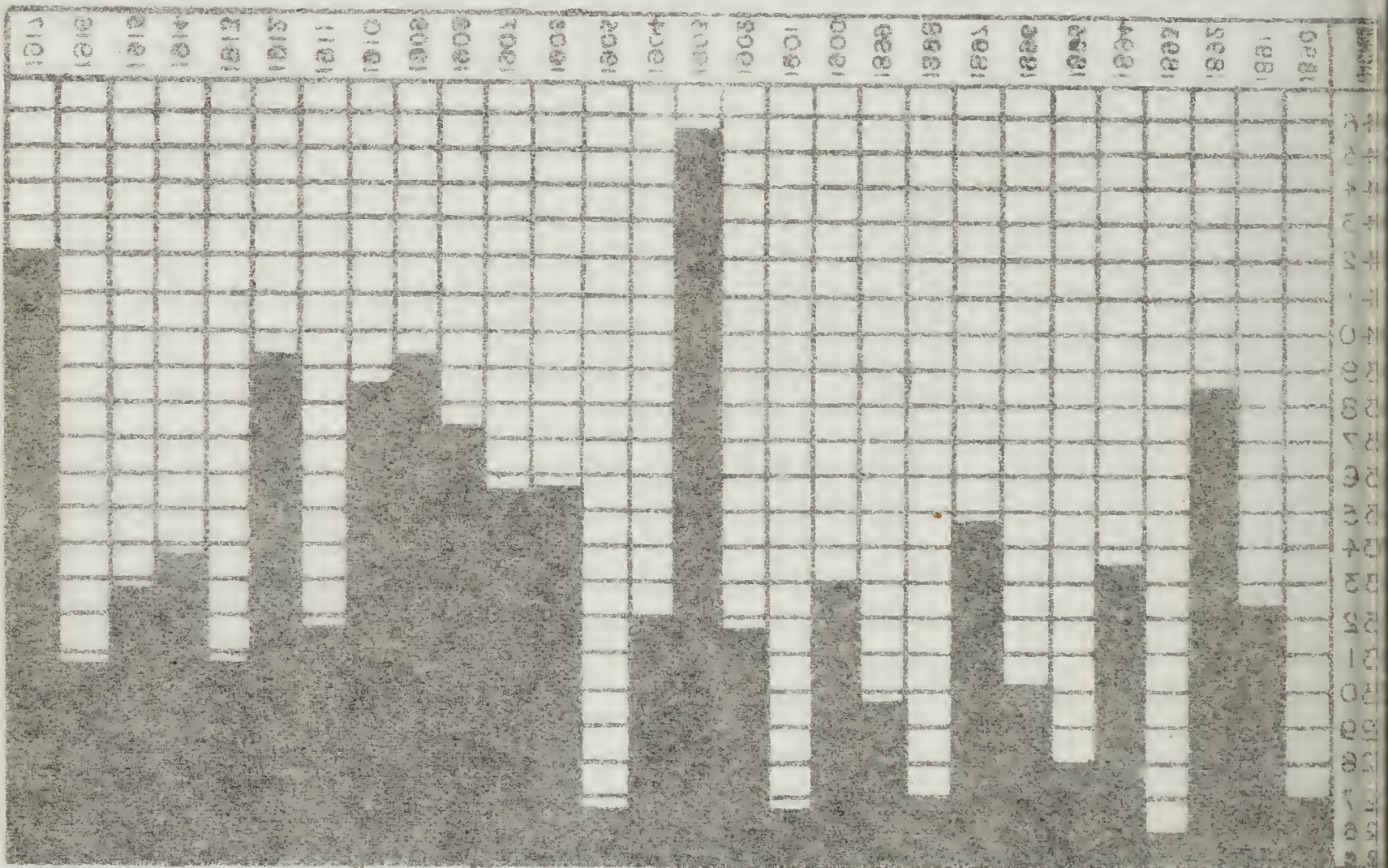


Table 3.  
TOTAL RAINFALL IN INCHES IN ST. HELENS SINCE 1890.



### Table 3.

WEEKLY RECORD OF METEOROLOGICAL CONDITIONS TAKEN AT  
VICTORIA PARK.

	Mean barometer in inches.	Maximum temperature	Minimum temperature	Mean temperature	Mean soil temperature (4 feet.)	Rainfall (total ins.)	WIND								Force of Wind.		
							Direction of Wind.								Total Mileage	Max- m'age per hour.	Max. Gust.
							Number of Hours per Week.										
							N	NE	E	SE	S	SW	W	NW			
6	29.302	53.2	48.3	41.3	43.8	.314	2	1	—	1	5	20½	85	53½	1,096	26	42
3	29.332	43.1	25.8	35.8	43.8	.950	66	—	6½	10	16	8	8½	54	1,666	26	42
0	29.639	37.3	28.2	33.8	42.5	.03	53½	26½	55	9½	1	1½	2	6	898	12	25
7	29.928	34.1	26.0	31.4	41.7	.00	—	—	88	60½	½	—	—	—	1,597	22	36
3	29.684	36.0	22.5	30.8	40.8	.00	14½	2	31	47½	4	14½	26½	28	742	20	36
0	29.973	37.8	9.9	24.5	40.1	.148	7½	½	29	77½	19½	5½	12	16½	354	14	18
7	29.856	39.7	28.1	33.9	39.4	.091	17½	13½	43	63	16½	—	7	7½	568	14	22
4	29.797	45.0	28.0	38.1	28.9	.979	2	—	33	76	32½	7	9	7½	549	8	14
2	29.903	47.8	28.9	43.9	39.0	.19	—	—	15	37	26½	16½	38½	34½	810	16	32
9	29.267	40.2	18.4	31.6	39.5	.126	12½	6½	75	58½	4½	—	1	7½	1,722	30	50
7	29.708	49.5	30.8	40.7	39.2	.0670	19	3	24½	20½	12	33	35½	21½	728	14	28
4	29.823	49.0	25.0	39.9	39.7	.0432	44	5½	9	11½	5½	10½	32	51	1,316	24	40
1	29.471	49.0	27.7	39.2	40.1	.578	32	2	17	6½	8	16	51	42½	1,250	20	36
7	29.474	46.9	22.0	37.4	40.2	.390	31	10½	27½	15½	11	16½	16	40	464	10	18
4	29.422	49.9	29.4	38.0	40.2	.577	15	—	2½	8	4½	40	48	51	1,076	16	30
1	29.776	52.0	31.0	42.6	40.5	.715	19½	—	½	½	6	5½	46½	89½	1,228	20	26
8	30.190	56.0	34.0	47.5	41.9	.021	3	—	15	14½	5	9½	41	80	738	16	26
2	29.869	66.9	34.0	51.0	45.0	.285	5	6	81	70	3½	1	1	½	469	20	28
5	29.814	75.7	37.8	53.0	43.3	.00	6½	½	33	37½	1½	1½	38½	45	644	20	20
9	29.769	69.9	41.0	61.0	46.4	.778	2	1	88	25	6	9½	7½	27½	1,278	24	38
6	29.798	70.0	50.9	59.2	47.6	.943	2	1	50	33	47½	19½	10	6	976	18	28
2	29.830	76.8	43.6	57.4	49.7	.106	1½	—	11	10½	44	18½	32	50½	1,130	12	24
9	29.709	69.0	54.0	61.4	51.0	.403	9	1½	19	36	25	21½	9½	46½	990	16	26
6	29.302	77.8	60.1	75.1	53.0	.028	14½	2	28	46½	23	25½	9½	16	628	12	17
3	30.022	74.0	56.0	63.1	54.2	.385	15½	3½	3	2½	4½	27	36½	75	872	16	28
0	29.902	64.0	53.1	63.1	54.5	.298	17	26	36	14½	8	12	25½	25	786	16	26
7	29.961	75.1	41.3	61.8	54.7	.004	9	—	104½	54½	—	—	—	—	908	6	24
4	29.983	79.8	46.2	63.9	54.8	.00	24	13	19	18	34½	9½	8	4½	1,005	6	26
1	29.691	71.0	50.2	63.0	56.7	1.46	—	—	7	11	24	27½	48	50½	1,195	7	36
8	30.021	78.2	54.0	64.8	57.7	.42	5½	5	8	3½	49	29	36½	31½	505	3	23
4	29.823	69.6	47.0	59.2	50.4	.16	70	6	—	—	—	—	5½	83½	1,193	7	26
1	29.823	69.6	47.0	59.2	56.4	0.16	15	19	27	38	40½	14½	8	6	498	3	20
8	29.525	70.2	56.9	55.6	58.4	2.59	—	—	5	21	65	16	59	2	1,422	8	26
5	29.717	85.5	59.6	61.5	58.5	129	—	out	of	ord	er	—	—	—	1611	10	33
1	39.312	63.2	55.1	57.5	58.3	2.49	—	—	—	—	—	—	—	—	1,808	11	33
8	29.834	71.8	41.8	56.8	57.6	.24	—	—	—	—	—	12	3	—	86	5	20
5	30.001	70.6	48.2	59.4	57.7	.33	7	—	20	21	11	28	47	34	969	13	68
2	29.746	69.2	50.0	59.6	57.2	.48	—	—	—	—	55	71	42	—	632	52	21
9	29.677	70.0	48.6	59.3	49.9	.47	—	—	—	—	49	61	58	—	704	—	22
6	29.790	56.0	44.0	51.2	44.8	1.92	3	—	—	12	34	31	49	39	986	58	19
3	29.226	55.0	38.0	45.0	54.5	2.50	6	4	—	27	16	26	24	65	1,603	15	20
0	29.418	56.4	48.3	50.2	52.4	.49	—	—	—	1	59	32	44	32	580	11	20
7	29.558	56.0	34.6	45.8	51.3	1.30	—	—	—	—	23	73	53	19	3,758	16	31
3	29.633	53.2	31.8	42.5	49.9	.89	—	3	32	31	19	47	24	12	828	25	16
0	29.511	55.0	38.0	46.5	49.4	1.42	3	—	9	5	47	19	44	41	1,992	26	24
8	30.098	49.0	40.0	44.9	48.7	.19	—	—	—	17	27	9	63	52	190	6	12
1	30.043	55.8	45.5	49.7	48.1	.79	—	—	—	—	—	36	129	3	2,104	14	21
8	29.696	57.8	31.0	48.4	48.5	1.03	—	—	—	—	—	87	50	31	3,121	20	31
3	30.046	53.0	30.2	39.0	47.6	.49	—	—	—	21	10	26	20	—	404	10	20
5	29.517	49.8	43.0	39.2	46.5	.61	—	3	40½	15	26	12	22	—	—	—	—
2	29.967	43.0	35.0	37.0	44.5	.45	7	7	6	7	4	—	—	—	—	—	—
9	30.446	45.3	34.0	34.5	43.5	.15	1	1	1	1	1	2	6	32	—	—	—
						22.01	561½	152½	1187	1096½	981	1001½	1261½	1418½	54805	58	50
02	29.508	57.3	38.9	47.1	49.5	.51											

Table 4.

The population of the borough at each census period.

Census of	*1801	*1811	*1821	*1831	*1841	1851	1861	1871	1881	1891	1901	1911
Eccleston ..	1,362	1,584	1,931	3,259	6,247	—	—	—	—	—	—	—
Sutton.....	1,776	2,114	2,329	3,173	4,095	—	—	—	—	—	—	—
Parr .....	1,183	1,405	1,523	1,942	3,310	—	—	—	—	—	—	—
Windle .....	3,252	4,294	4,820	5,825	6,918	—	—	—	—	—	—	—
St. Helens..	7,573	9,397	10,603	14,199	20,570	25,660	38,135	45,548	57,940	72,413	84,410	96,550

\* Previous to 1851, the populations given are those of Eccleston, Sutton, Parr, and Windle, and are not strictly comparable to those of the present borough.

Table 5.

Population of the various wards as shown by census returns.

WARDS.	Area in Statute Acres (Land and Inland Water).	Families or Separate Occupiers.		POPULATION.				Institutions, Large Establishments, Vessels, etc., 1911 (included in (cols. 4 & 6).	
				1901	1911				
		1901	1911	Persons	Persons	Males	Females	Number	Popu- lation.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
St. HELENS....	7,284	15,390	17,833	84,410	96,551	50,309	46,242	28	1,981
North Eccleston. . .	235·43	—	2,253	10,551	12,252	6,425	5,827	—	—
South Eccleston. . .	621·62	—	2,337	8,835	11,873	6,036	5,837	—	—
Central . . . . .	94·4	—	1,077	5,235	6,336	3,457	2,879	12	369
North Windle . . . .	697·08	—	2,446	11,457	12,188	6,057	6,131	—	—
South Windle . . . .	67·11	—	1,533	8,315	8,279	4,261	4,018	1	59
Hardshaw . . . . .	342·68	—	2,160	9,690	11,526	6,128	5,398	6	250
East Sutton . . . . .	1,312·31	—	2,179	9,524	11,584	6,186	5,398	3	133
West Sutton . . . . .	2,429·15	—	1,653	9,524	10,304	5,278	5,026	5	1,040
Parr . . . . .	1,484·53	—	2,195	10,014	12,209	6,481	5,728	1	130

**Table 6.**

The age and sex distribution of the population at the census taken in 1911.

				Males	Females					Males.	Females
ALL AGES ...				50,309	46,242						
Under 1 year	...			1,344	1,301	Under 5 years	...			6,462	6,285
1 and under 2	...			1,250	1,269	5 and under 10	...			5,918	5,767
2	„	3	...	1,348	1,325	10	„	15	...	5,419	5,332
3	„	4	...	1,276	1,208	15	„	20	...	5,165	4,475
4	„	5	...	1,244	1,182	20	„	25	...	4,755	4,021
5	„	6	...	1,178	1,146	25	„	30	...	4,271	3,773
6	„	7	...	1,234	1,213	30	„	35	...	4,001	3,440
7	„	8	...	1,206	1,187	35	„	40	...	3,635	3,080
8	„	9	...	1,150	1,097	40	„	45	...	2,812	2,487
9	„	10	...	1,150	1,124	45	„	50	...	2,424	2,154
10	„	11	...	1,106	1,091	50	„	55	...	1,917	1,690
11	„	12	...	1,083	1,077	55	„	60	...	1,411	1,345
12	„	13	...	1,103	1,084	60	„	65	...	910	953
13	„	14	...	1,062	1,041	65	„	70	...	652	651
14	„	15	...	1,065	1,039	70	„	75	...	349	478
15	„	16	...	1,033	946	75	„	80	...	141	231
16	„	17	...	1,058	887	80	„	85	...	51	64
17	„	18	...	1,036	862	85	„	90	...	12	14
18	„	19	...	1,081	878	90	„	95	...	4	2
19	„	20	..	957	902	95	„	100	...	—	—
20	„	21	..	951	835	100 years and upwards	...			—	—



**Table 8.**

The number of empty houses in the borough in Dec., 1917.

WARD.	Premises vacant.	Number closed as unfit for habitation.	Number of shops vacant.	Number of large houses vacant.	Number of houses for working classes vacant.	Number of houses for the working classes in course of erection.
North Eccleston...	—	—	—	—	—	—
South Eccleston...	14	12	1	1	—	—
Central .....	14	—	14	—	—	—
North Windle.....	—	—	—	—	—	—
South Windle.....	8	—	7	—	1	—
Hardshaw .....	46	16	21	1	8	—
East Sutton .....	10	3	4	—	3	—
West Sutton .....	13	6	4	1	2	3
Parr.....	17	11	4	—	2	—

**Table 9.**

The number of houses with the various types of sanitary conveniences existing in the borough.

Year.	Water closet.	Tub and pail closet.	Privy midden.	Total.
1907 ...	6,106	7,150	5,154	18,410
1908 ...	6,503	7,120	4,907	18,530
1909 ...	6,718	7,071	4,795	18,584
1910 ...	7,041	7,028	4,616	18,685
1911 ...	7,626	6,863	4,338	18,827
1912 ...	9,205	5,734	4,019	18,958
1913 ...	10,493	5,058	3,542	19,093
1914 ...	12,316	4,058	2,829	19,203
1915 ...	13,100	3,704	2,529	19,333
1916 ...	13,298	3,592	2,472	19,362
1917 ...	13,455	3,422	2,353	19,230

**Table 10.**

The number of conversions to the water carriage system completed each year since 1904.

	Privies.	Tub and pail closets.	Total.
1904	69	67	136
1905	80	64	144
1906	47	19	66
1907	237	125	362
1908	243	24	267
1909	106	38	144
1910	179	33	212
1911	270	129	399
1912	301	691	992
1913	460	646	1,106
1914	691	976	1,658
1915	300	380	680
1916	57	112	169
1917	45	103	148

**Table 11.**  
Number of notices served.

	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
to clean choked drains and w.c.'s .. ..	477	459	502	358	424	313	225	337	320	343	283	386
to repair or relay defective drains .. ..	161	109	112	102	91	58	87	107	62	77	50	55
to clean dwelling-houses .. ..	0	0	0	3	2	6	40	10	3	3	4	0
to disconnect and ventilate drains .. ..	155	140	60	62	24	5	10	3	1	24	4	8
to disconnect downspouts .. ..	26	24	35	29	10	5	8	10	0	2	9	4
to repair or lengthen w.p. to slopstones ..	47	59	139	86	54	33	42	48	113	52	39	15
to provide w.p. to slopstones .. ..	23	16	33	25	29	60	20	29	11	61	22	27
to provide slopstones .. ..	41	34	44	32	53	55	27	29	10	12	4	5
to repair w.c.'s, baths, basins, lavatories												
to land cisterns .. ..	47	76	123	92	132	171	88	121	258	269	147	190
to repair roofs of dwelling-houses .. ..	107	98	154	119	257	161	126	209	159	202	64	187
to cleanse backyards, privies, & passages ..	36	41	76	74	19	16	11	10	5	13	12	25
to cleanse and whitewash filthy dwellings..	62	31	42	24	36	19	30	23	30	35	25	58
to provide doors to privies, pail closets,												
to land ashpits .. ..	228	393	438	488	330	340	211	182	103	109	120	145
to repair or re-hang doors to pail closets,												
to land ashpits and privies .. ..	105	202	321	373	405	328	205	322	143	49	45	60
to repair privies and ashpits .. ..	85	109	91	138	221	16	33	56	52	41	29	25
to repair eaves and downspouts .. ..	133	137	167	173	232	195	174	103	169	179	61	115
to provide eaves and downspouts .. ..	59	95	90	78	141	119	138	79	85	91	33	21
to repair pavement, etc., in backyards ..	165	211	398	318	323	6	113	174	214	206	74	51
to re-hang windows .. ..	36	81	8	7	9	4	5	29	82	78	34	27
to repair pavement and floors in dwelling-												
houses .. ..	76	75	100	65	179	145	179	139	219	109	42	37
to remove fowls, pigeons, etc., from near												
dwelling .. ..	9	8	19	3	9	9	9	12	27	19	0	0
to remove pigs .. ..	13	10	15	10	15	14	14	10	18	14	0	0
to remove rubbish .. ..	20	18	46	52	7	8	6	6	11	19	12	15
to remove manure .. ..	11	12	20	10	14	7	3	17	12	9	12	8
to reconstruct middensteads .. ..	23	8	14	9	1	2	4	8	2	5	1	2
to clean foul ditches and cesspools .. ..	22	17	6	39	11	4	12	14	4	0	1	1
to provide or repair ashboxes .. ..	264	527	532	328	54	17	42	78	27	53	23	23
to remove nuisance due to overcrowding	29	12	30	11	36	36	24	20	34	53	19	16
to replaster walls or ceilings of dwellings	86	62	173	107	288	209	248	164	274	276	89	160
to prevent dampness in dwellings .. ..	26	22	41	25	74	48	21	72	87	95	48	70
to remove sheds, etc., from backyards ..	9	8	5	3	7	8	4	8	4	12	3	0
to remedy defects in bakehouses .. ..	23	25	35	31	17	7	5	2	7	25	9	13
to remedy defects in workshops .. ..	10	16	39	20	22	9	12	42	22	15	23	20
to remedy defects in cowsheds & dairies	10	24	1	2	15	10	4	7	4	22	10	6
to provide water supply .. ..	0	0	0	0	31	1	5	33	1	1	5	2
to remedy miscellaneous nuisances .. ..	153	170	257	205	285	297	187	144	206	376	138	191
to convert to water carriage .. ..	118	381	264	169	322	764	1,128	2,446	1,882	449	96	38
<b>Totals .. ..</b>	<b>2,895</b>	<b>3,508</b>	<b>4,430</b>	<b>3,670</b>	<b>4,209</b>	<b>3,505</b>	<b>3,500</b>	<b>5,093</b>	<b>4,451</b>	<b>3,398</b>	<b>1,590</b>	<b>2006</b>

Table 12.

Metric tons of total solids per square Kilometre deposited during the year 1917.

A metric ton per square Kilometre is approximately 9lbs. per acre.

	Leicester .....	190·60
LONDON	{ Meteorological Office .....	173·88
	{ Embankments Gardens .....	543·12
	{ Finsbury Park .....	223·99
	{ Ravenscourt Park.....	213·81
	{ Southwark Park .....	283·02
	{ Wandsworth Com. ....	51·50
	{ Golden Lane .....	191·46
	Malvern .....	40·55
MAN- HESTER	{ Queen's Park .....	181·99
	{ School of Technology .....	234·60
	Newcastle-on-Tyne .....	294·26
	Rochdale .....	290·11
	St. Helens .....	263·01

Table 13.

Number of animals slaughtered and amount of diseased meat destroyed.

ABATTOIR.					PRIVATE SLAUGHTER HOUSES.			
1917	Killed.	Diseased.		Weight in lbs.	Killed.	Diseased.		Weight in lbs.
		Tuber- culosis.	Other diseases.			Tuber- culosis.	Other diseases.	
Beasts .....	4,967	412	568	36,095	107	0	5	92
Calves .....	633	1	2	196	0	0	0	0
Sheep .....	4,216	0	6	229	1,232	0	2	35
Pigs .....	3,858	56	33	2,536	3,858	85	210	6,973

About 2,044 lbs. of fish, 359 lbs. of fruit, and 28 lbs. of other foodstuffs were found to be unsound and were destroyed.

Table 14.

The results of analyses of milk samples.

Per Cent.		FAT.										Total.
		Under 2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	Over 3.5	
NON-FATTY SOLIDS.	Under 8.1	2		1	1	2		1		1	1	9
	8.2	1					1		1	2	2	7
	8.3							1				1
	8.4				2	1			1	1	7	12
	8.5	2		2	3	3	7	5	4	2	10	38
	8.6	1			2	2	3	3	5	3	37	56
	8.7	1	2		6	5	5	12	5	8	25	69
	8.8	2	1	3	5	5	3	4	8	11	42	84
	8.9	1	3	1	7	8	4	14	7	2	44	93
	9.0			3	1	2	3	2	2	1	7	21
	Over 9.0	4	6	6	15	13	24	16	11	13	63	169
Total...		14	12	16	42	41	50	58	44	44	238	559

Table 15.

Results of analyses of other foods.

			Number of samples					Number of samples	
			Exam-ined.	Adul-terated				Exam-ined.	Adul-terated
Milk...	...	...	559	57	Sugar	..	...	5	1
Butter	...	...	16	2	Mustard	...	...	1	0
Cheese	...	...	3	0	Confectionery & Jam			1	0
Margarine	...	...	7	0	Pepper	...	...	8	2
Lard	..	...	4	0	Wine	...	...	0	0
Bread	...	...	0	0	Beer	...	..	1	0
Flour	...	...	16	0	Spirits	...	..	0	0
Tea ...	...	...	2	0	Drugs	...	...	14	0
Coffee	...	...	4	1	Other articles	...	...	75	10
Cocoa	...	...	2	0	TOTAL	...	...	718	73

**Table 16.**

Defects discovered in Factories.						1917.
Insufficient sanitary accommodation	...	...	...	...	...	2
No screens to sanitary conveniences	...	...	...	...	...	4
No suitable partitioning of sanitary conveniences	...	...	...	...	...	2
No intervening space between closets and machine room	...	...	...	...	...	1
Dirty and insanitary condition of closets	...	...	...	...	...	3
Limewashing of walls and ceilings required	...	...	...	...	...	1
Limewashing of closets required	...	...	...	...	...	1
Defective w.c. cistern	...	...	...	...	...	1
Defective closet roof	...	...	...	...	...	1
No inside fastens on doors of women's closets	...	...	...	...	...	3
No doors to closets	...	...	...	...	...	2
Closets insufficiently lighted	...	...	...	...	...	2
Closets insufficiently ventilated	...	...	...	...	...	1

**Table 17.**

Defects discovered in workshops.						
Limewashing of walls and ceilings required	...	...	...	...	...	8
Provide ashbins	...	...	...	...	...	1
Cleanse rooms	...	...	...	...	...	7
Cleanse yard	...	...	...	...	...	2
Defective w.c. cistern	...	...	...	...	...	1
Choked drain	...	...	...	...	...	1

**Table 18.**  
HOME OFFICE TABLES.

1.—Inspection.

*Including inspections made by sanitary inspectors or inspectors of nuisances.*

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories ... .. (Including Factory Laundries.)	48	18	—
Workshops ... .. (Including Workshop Laundries.)	206	20	—
Workplaces ... ..	13	0	—
Total ... ..	267	38	—

**Table 19.**

2.—Defects found.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness .. ..	1	1	—	—
Want of ventilation .. ..	—	—	—	—
Overcrowding .. ..	—	—	—	—
Want of drainage of floors .. ..	—	—	—	—
Other nuisances .. ..	—	—	—	—
Sanitary accommodation.	{ insufficient .. ..	2	2	—
	{ unsuitable or defective..	14	13	—
	{ not separate for sexes ..	1	1	—
<i>Offences under the Factory &amp; Workshop Acts :</i>				
Illegal occupation of underground bake-houses (s. 101) .. ..	—	—	—	—
Breach of special sanitary requirements for bakehouse (ss. 97 to 100).	10	10	—	—
Other offences .. ..	3	2	—	—
Total .. ..	31	29	—	—

\* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Table 20.

3.—Home work.

Nature of Work.	OUTWORKERS' LISTS, SECTION 107.			
	Lists received from Employers.			Notices served on Occupiers as to keeping or sending lists.
	Sending twice in the year.			
	Lists	Outworkers		
Con- tractors.		Work- men		
1	2	3	4	5
Wearing Apparel—				
Making, etc. .. ..	8	1	9	—
Cleaning and washing	—	—	—	—
Household linen .. ..	—	—	—	—
Lace, lace curtains and nets	—	—	—	—
Curtains and furniture				
hangings .. ..	—	—	—	—
Furniture and upholstery..	—	—	—	—
Electro-plate .. ..	—	—	—	—
File making .. ..	—	—	—	—
Brass and brass articles ..	—	—	—	—
Fur pulling .. ..	—	—	—	—
Cables and chains .. ..	—	—	—	—
Anchors and grapnels ..	—	—	—	—
Cart gear .. ..	—	—	—	—
Locks, latches and keys..	—	—	—	—
Umbrellas, etc. .. ..	—	—	—	—
Artificial flowers .. ..	—	—	—	—
Nets, other than wire nets..	—	—	—	—
Tents .. ..	—	—	—	—
Sacks .. ..	—	—	—	—
Racquet and tennis balls	—	—	—	—
Paper, etc., boxes, paper				
bags .. ..	—	—	—	—
Brush making .. ..	—	—	—	—
Pea picking .. ..	—	—	—	—
Feather sorting .. ..	—	—	—	—
Carding, etc. of buttons etc	—	—	—	—
Stuffed toys .. ..	—	—	—	—
Basket making .. ..	—	—	—	—
Chocolates and sweetmeats	—	—	—	—
Cosaques, Christmas crac-				
kers, Christmas Stockings				
etc. .. ..	—	—	—	—
Textile weaving .. ..	—	—	—	—
TOTAL ..	8	1	9	—

Table 21.

4.—Registered workshops.

Important classes of workshops, such as workshop bakehouses may be enumerated here.	Workshops on the Register (s. 131) at the end of the year.								Number.
	(1)								(2)
	Dressmakers and mantle making	..	..	..	..	..	..	..	44
	Milliners ..	..	..	..	..	..	..	..	21
	Tailors ..	..	..	..	..	..	..	..	14
	Hosiery Knitters	..	..	..	..	..	..	..	9
	Joiners, builders, cabinet-makers and plumbers, etc.	..	..	..	..	..	..	..	14
	Blacksmiths, wheelwrights, coach builders and masons	..	..	..	..	..	..	..	8
	Weighing machine repairers	..	..	..	..	..	..	..	2
	Cloggers and boot repairers	..	..	..	..	..	..	..	43
	Cycle makers	..	..	..	..	..	..	..	2
	Cooper	..	..	..	..	..	..	..	1
	Tripe Dresser	..	..	..	..	..	..	..	2
	Herbal Brewer	..	..	..	..	..	..	..	3
	Pearl Ash Manufacturer	..	..	..	..	..	..	..	1
	Seltzogene, charge maker	..	..	..	..	..	..	..	1
	Tea wrapping	..	..	..	..	..	..	..	1
	Drysalter	..	..	..	..	..	..	..	1
	Leadlight maker	..	..	..	..	..	..	..	2
	Cab washing	..	..	..	..	..	..	..	2
	Saddler	..	..	..	..	..	..	..	1
	Knackers Yard	..	..	..	..	..	..	..	1
	Sundries	..	..	..	..	..	..	..	14
	Ice Cream Makers	..	..	..	..	..	..	..	5
	Total number of Workshops on Register								193

Table 22.

5.—Other matters.

Class.	Number.
1	2
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts (S. 133, 1901) .. .. .	0
Action taken in matters re-Notified by H.M. Inspector ..	14
ferred by H.M. Inspectors as { remediable under the Public Health Acts, but not under the Factory and Workshops Acts (S. 5, 1901)	13
Reports of Action taken sent to H.M. Inspector.	
Other .. .. .	2
Underground Bakehouses (S. 101) :—	
Certificates granted during the year .. .. .	—
In use at the end of the year .. .. .	1

Table 23.

Admissions, discharges, and deaths of St. Helens Patients during 1917.  
Peasley Cross Isolation Hospital.

DISEASE.	In hospital Jan. 1st, 1917.		Admitted.		Dis- charged.		Died		In hospital Jan 1st, 1918.		Number of days.	
	M	F	M	F	M	F	M	F	M	F	M	F
Typhoid fever ..	—	—	6	4	6	2	—	2	—	—	239	66
Scarlet fever....	35	39	260	308	256	303	8	12	31	32	10234	13033
Diphtheria .....	18	25	255	314	210	272	32	39	31	28	7264	8010
Puerperal fever .	—	—	—	5	—	5	—	—	—	—	—	115
Measles .....	—	—	11	10	8	6	3	4	—	—	305	201
Other diseases ..	1	—	3	8	2	7	1	1	1	—	48	151
Venereal diseases	—	—	22	20	21	19	—	—	1	1	156	127
	54	64	557	669	503	614	44	58	64	61	18246	21703

Table 24.

Admissions, discharges and deaths of St. Helens patients during 1917,  
Old Whint Hospital, Haydock.

DISEASE	In hospital Jan 1st, 1917.		Admitted		Discharged		Died		In hospital Jan 1st, 1918.		Total number of days in hospital	
	M	F	M	F	M	F	M	F	M	F	M	F
Maternity .....	—	—	—	31	—	22	—	2	—	7	—	1347
Scabies .....	—	—	20	16	18	15	—	—	2	1	2103	989
Observation cases .....	—	—	13	10	11	8	—	1	2	1	323	330
Whooping cough	—	—	14	9	14	9	—	—	—	—	441	337
Marasmus .....	—	—	15	12	6	3	6	6	3	3	1247	997
Pneumonia .....	—	—	3	2	1	2	2	—	—	—	33	105
Other diseases ..	—	—	14	22	10	14	1	7	3	1	471	700
	—	—	79	102	60	73	9	16	10	13	4618	4805

Table 25.

Admissions, discharges, and deaths of Haydock patients during 1917  
Peasley Cross Isolation Hospital.

DISEASE.	In hospital Jan. 1st, 1917		Admitted.		Discharged.		Died.		In hospital Jan. 1st, 1918,	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Enteric Fever ..	—	—	—	1	—	1	—	—	—	—
Scarlet fever....	2	2	10	7	10	7	—	—	2	2
Diphtheria .....	—	—	—	3	—	3	—	—	—	—
	2	2	10	11	10	11	—	—	2	2

**Table 26.**

Table showing the number of maternity and child welfare cases treated in Peasley Cross.

Disease.	Admitted.	Number of days in hospital.
Marasmus .....	16	590
Difficult labour .....	6	130
Ophthalmia .....	16	400
Mother with baby ....	12	251
Baby with mother.....	3	57
Puerperal fever .....	5	115

Total number of mothers ... .. 23  
  „       „       „ babies ... .. 35  
  „       „       „ days in hospital of mothers ... .. 596  
  „       „       „ days in hospital of babies ... ..1057  
The particulars relating to these patients are included in table 23.

**Table 27.**

Total and average number of days spent by Haydock patients in hospital.

DISEASE.	Enteric fever.	Scarlet fever.	Diphtheria.	Other diseases.
Total days .....	21	778	72	—
Average duration in days per patient treated .....	21.0	37.1	24.0	—

Table 28.

Percentage of cases of infectious diseases removed to hospital.

	1911.	1912.	1913.	1914.	1915.	1916.	1917.
Scarlet fever .	81·4	85·6	82·8	87·1	98·4	96·6	97·07
Diphtheria .....	74·8	69·6	70·9	88·3	93·0	92·7	96·4
Enteric fever .	94·0	93·0	100·0	92·5	100·0	100·0	100·0
Puerperal fever	18·1	50·0	50·0	64·7	100·0	60·0	100·0
Erysipelas .....	5·2	7·5	4·0	1·8	5·4	1·2	4·01
Phthisis .....	0·8	70·0	34·3	55·5	67·6	75·0	92·6
Ophthalmia ....	0·0	0·0	0·0	11·5	12·6	11·5	33·33

Table 29.

MATERNITY AND INFANT WELFARE CENTRES		First visits	Subsequent visits
Number of expectant mothers attending the centres .....		45	27
Number of mothers attending the centres .....		889	468
Number of children attending the centres .....		977	498
Number of attendances of	{ expectant mothers .....	133	
	{ mothers.....	4899	
	{ children.....	5215	

**Table 30.—Venereal Disease.**

Annual return relating to persons residing in the County Borough of St. Helens who were treated at the Treatment Centre at Cloughton Street during the year ending on the 31st December, 1917.

		Males	Females
1	Number of persons dealt with at or in connection with the out-patient Clinic for the first time and found to be :—		
	Suffering from syphilis .....	19	13
	„ „ soft chancre .....	—	—
	„ „ gonorrhœa .....	5	1
	Not suffering from venereal disease .....	1	2
	TOTAL ..	25	16
2	Number of persons discharged from the out-patient Clinic after completion of treatment for :—		
	Syphilis .....	—	—
	Soft chancre .....	—	—
	Gonorrhœa .....	1	—
	TOTAL ..	1	—
3	Number of persons who ceased to attend the out-patient Clinic without completing treatment and who were suffering from :—		
	Syphilis .....	—	—
	Soft chancre .....		
	Gonorrhœa .....		
	TOTAL ..	—	—
4	Total attendances of all persons at the out-patient Clinic who were :—		
	Suffering from syphilis .....	85	40
	„ „ soft chancre .....	—	—
	„ „ gonorrhœa .....	19	1
	Not found to be suffering from venereal disease ..	1	7
	TOTAL ..	105	48
5	Aggregate number of “ In-patient days ” of treatment given to persons suffering from :—		
	Syphilis .....	241	190
	Gonorrhœa .....	28	27
	TOTAL ..	269	217
AS IN-PATIENTS			
6	Number of persons treated with Salvarsan substitutes....	16	13
7	Number of dozes of Salvarsan substitutes given :—	Number of dozes	
	Name of drug—Kharsivan      Dose—0.3 .....	6	
	Doze—0.6 .....	23	
	Galyl      Doze—0.25 .....	41	
	Doze—0.4 .....	16	
8.	Examinations of Pathological material :—		
	(a) Specimens from persons attending at the Treatment Centre which were examined at this Centre :—	Number.	
	For detection of spirochetes .....	None.	
	„ „ „ gonococci .....		
	„ Wassermann reaction .....		
	Others .....		
	(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an independent laboratory :—		
	For detection of spirochetes .....	16	
	„ „ „ gonococci .....	10	
	„ Wassermann reaction .....	18	
	Others .....	17	
	TOTAL ..	61	

**Table 31.**

Amount of clothing, etc., disinfected during 1917.

Hospital clothing and bedding	...	...	...	7,320
Blankets, sheets, and rugs	...	...	...	3,980
Pillows and cushions	...	...	...	3,450
Beds	...	...	...	1,875
Other articles of clothing	...	...	...	8,320
Library books	...	...	...	334
Other articles	...	...	...	5,315
Blankets and rugs for soldiers	...	...	...	500
Articles of clothing for soldiers	...	...	...	675
Total			...	31,769

**Table 32.**

Investigations carried out in the municipal laboratory.

Specimens.	Number received	Results.	
		Positive	Negative
Diphtheria—swab .....	7766	600	7166
Typhoid fever—blood .....	39	12	27
Tuberculosis—sputum .....	352	65	287
Ringworm—hair .....	22	16	6
Other specimens .....	36	6	30
Total .....	8215	699	7516

**Table 33.**

Vaccination returns since 1897.

YEAR.	2 Vaccin- ated.	3. Insus- ceptible.	4 Dead.	5 Con- Obj'e't'r	6 Post- poned.	7 Removed	8 Un- accounted	Percentage not Vaccinated including Columns 5, 6, 7, 8
1897	2,680	11	390	4	7	110	7	4.9
1898	2,696	15	383	14	1	103	15	4.6
1899	2,625	32	346	10	3	94	16	4.8
1900	2,654	10	367	5	12	82	18	4.2
1901	2,639	4	391	11	29	59	24	4.4
1902	2,788	4	342	7	12	58	34	3.8
1903	2,977	8	325	2	6	62	11	2.6
1904	2,940	7	341	10	10	42	25	2.8
1905	2,923	3	270	6	10	29	18	2.1
1906	2,733	5	318	8	12	39	22	2.8
1907	2,810	9	257	24	19	49	17	3.7
1908	2,858	18	248	70	11	35	20	4.5
1909	2,720	8	241	81	9	33	11	4.7
1910	2,731	3	255	131	3	23	19	6.0
1911	2,750	9	277	148	5	26	14	6.5
1912	2,646	4	249	216	12	23	4	8.7
1913	2,499	6	296	339	14	27	9	13.0
1914	2,654	11	281	348	6	22	24	13.0
1915	2,352	2	189	367	9	34	15	15.3
1916	2,056	4	186	287	3	39	24	14.6

\*The above Returns are for St. Helens Sub-District of the Prescott Union, which does not include quite the whole of the Borough.

**Table 34.**

Classification according to age of the cases of and deaths from diphtheria.

Ages.	Under 1 year	1—5	5—15	15—25	25—45	45—65	65 & over.
Cases .....	7	182	280	46	20	2	1
Deaths.....	3	54	21	1	0	0	0

**Table 37.**

Classification according to age of the cases of and deaths from scarlet fever.

Ages.	Under 1 year.	1—5	5—15	15—25	25—45	45—65	65 & over.
Cases .....	11	174	34	46	12	2	0
Deaths .....	2	14	3	0	1	0	0

**Table 38.**

Classification according to age of deaths from measles.

Ages.	Under 1 year.	1—2	2—5	5—15	15—25	25 and over.
Deaths .....	11	26	22	6	—	—
Death-rate per 1,000 of the population at these ages .....	.12	.28	.24	.06	—	—

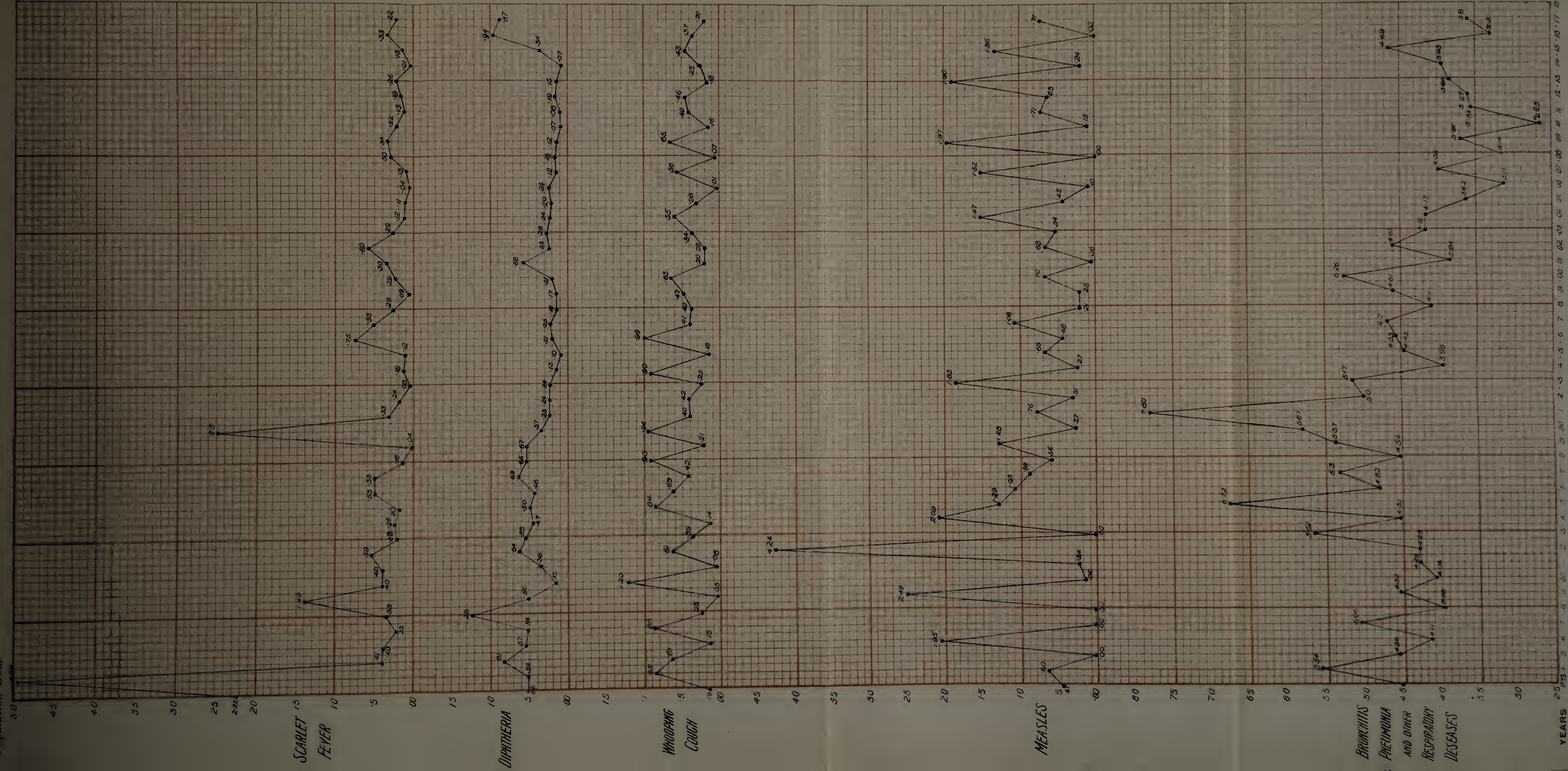
**Table 39.**

Classification according to age of the deaths from diarrhoea and enteritis.

Ages.	Under 1 year	1-2	2-5	5-15	15-25	25-45	45-65	65 and upw'ds
Deaths....	16	9	3	—	—	—	3	6

Death Rate  
per 1000 of the  
Population from

Table 55.

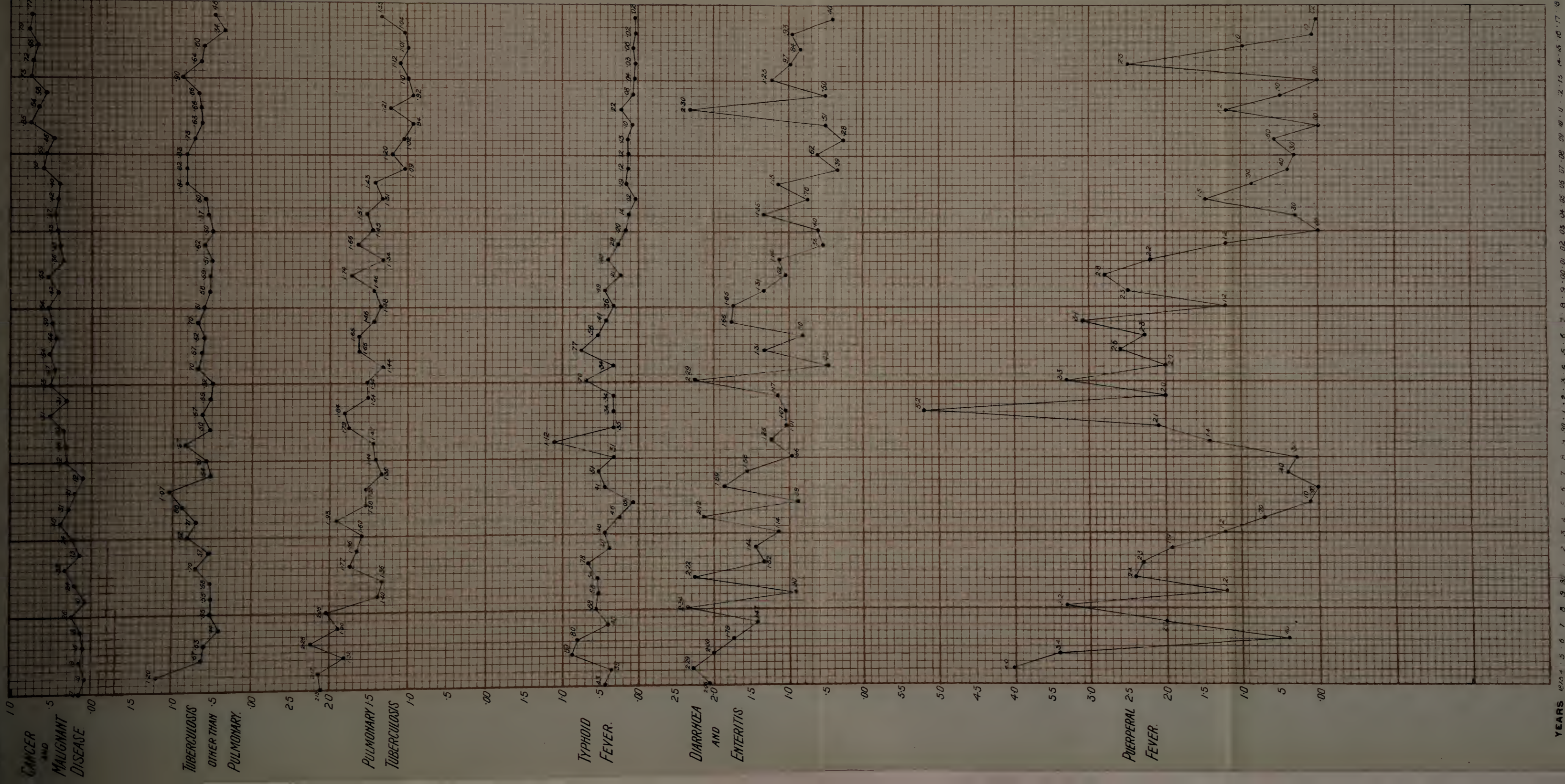


YEARS



TEMPERATURE  
TIME

Table 36.



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**Table 40.**

Classification according to age of the cases of pulmonary tuberculosis.

	0-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65 up.
Males .....	—	3	13	20	42	27	13	8	—
Females .....	—	3	17	19	18	17	13	2	—
Totals...	—	6	30	39	60	44	26	10	—

**Table 41.**

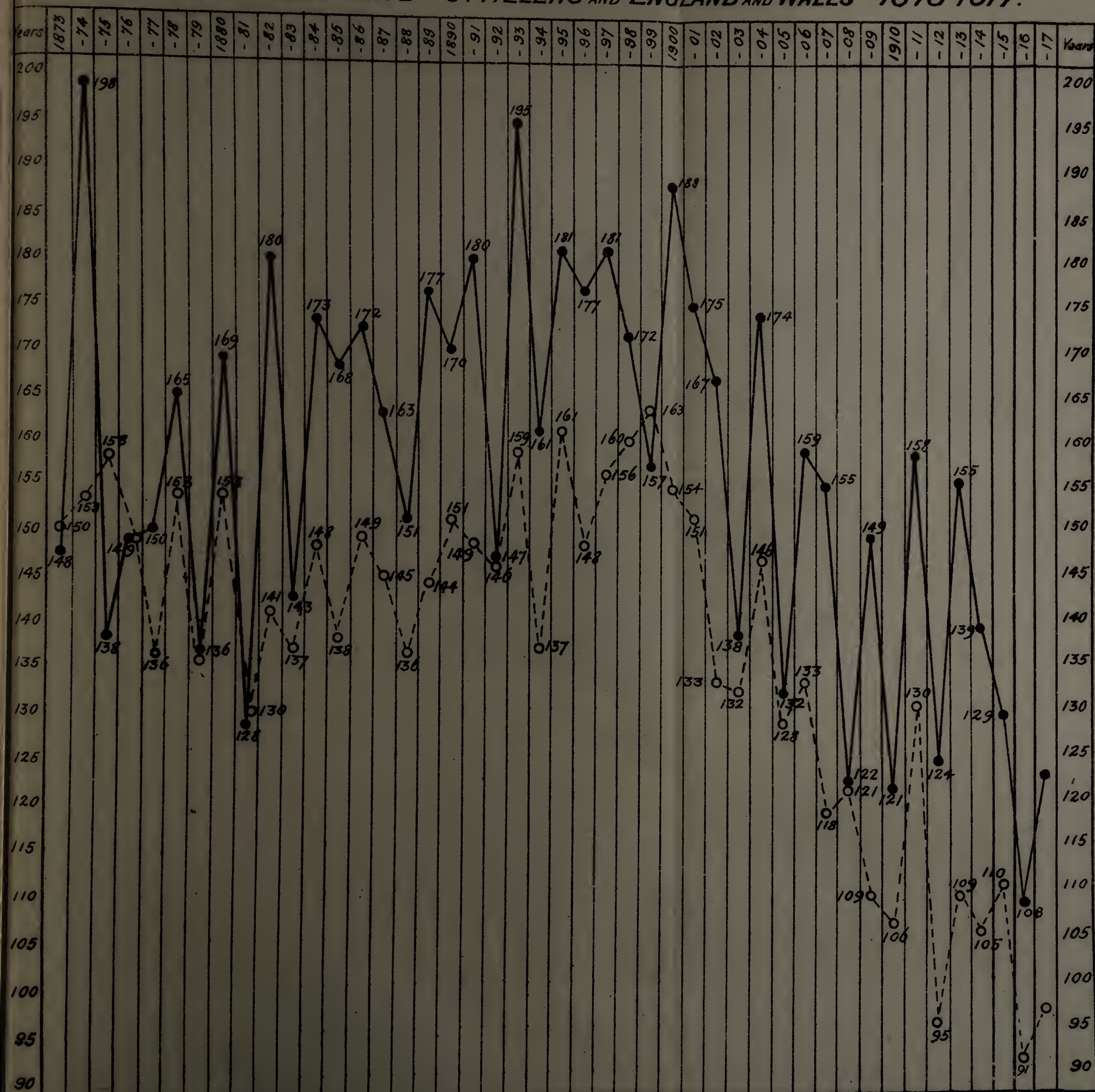
Classification according to age of the cases of non-pulmonary tuberculosis.

Ages.	Under 1 year	1-5	5-15	15-25	25-35	35-45	45-55	55-65	Over 65	Total
Males .....	—	12	12	6	4	3	2	1	—	40
Females .....	1	10	12	7	2	—	—	—	—	35
Total .....	1	22	24	13	6	3	2	1	—	75

**Table 42.**  
The admissions and discharges at Ecclestone Hall.

	Remaining in on Dec. 31st, 1916.		Admitted during 1917.		Discharged during 1917.		Died during 1917.		Left without permission.		Dismissed for unsatisfactory behaviour.		Remaining in on Dec. 31st, 1917.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
A (Early cases). ...	—	3	7	17	5	13	—	—	—	3	—	—	2	4
B. (Intermediate cases).	16	13	35	21	35	31	2	1	2	—	3	—	9	2
C. (Late cases) ...	7	4	61	34	31	16	21	14	5	1	—	—	11	7
D. (Observation cases).	—	—	5	5	2	—	—	—	—	—	—	—	3	5
E.	—	—	2	5	1	4	—	—	1	—	—	—	—	1

**Table 45.**  
**INFANTILE MORTALITY RATE - ST HELENS AND ENGLAND AND WALES - 1873-1917.**



*St Helens. ——— England & Wales. ----o----*

INVENTILE MORTALITY RATE - ST HELENS AND ENGLAND

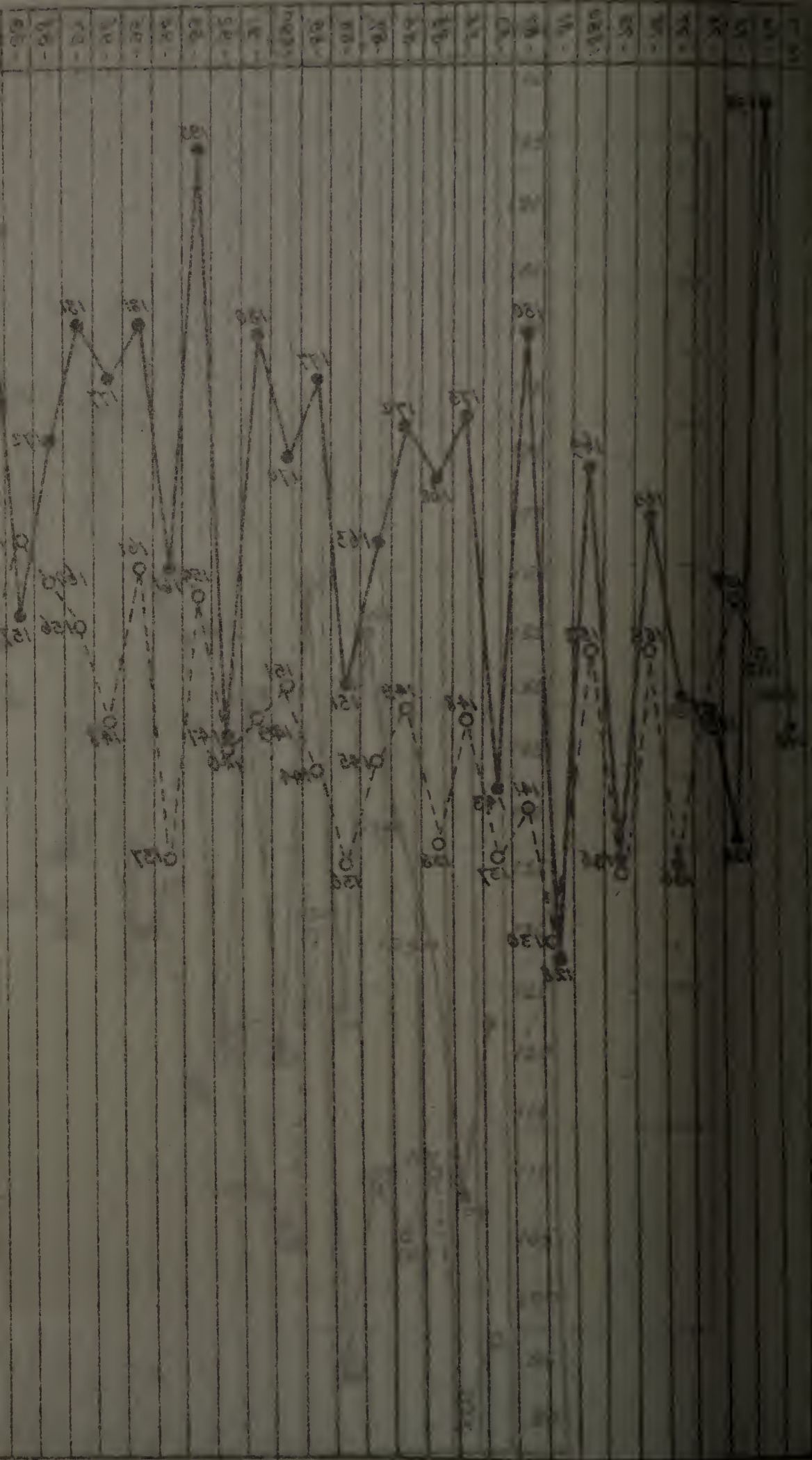
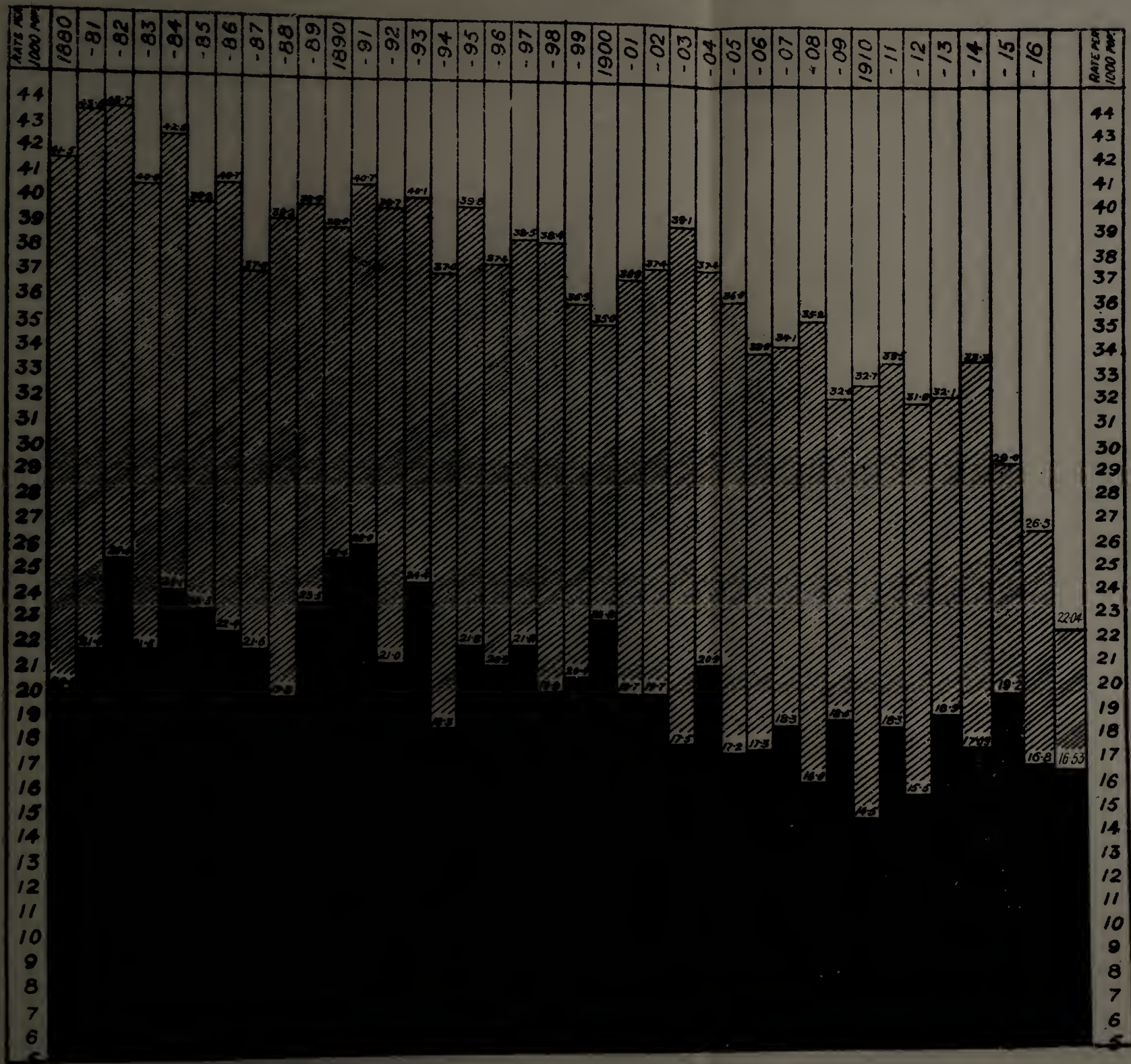


Table 46.

## BIRTH RATE, DEATH RATE AND RATE OF NATURAL INCREASE. ST HELENS 1880 - 1917.



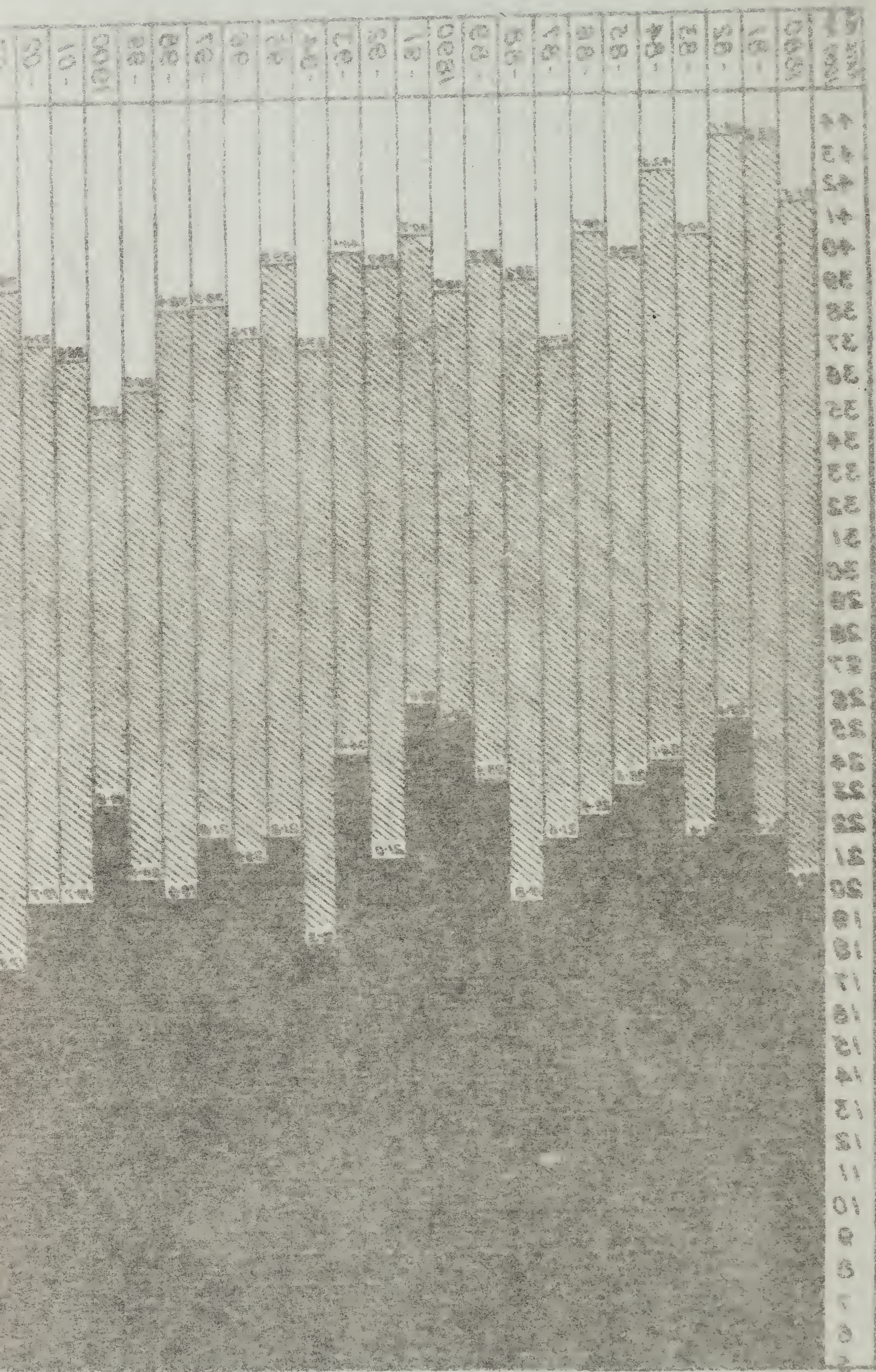
The Black portion represents the DEATH RATE.

The Shaded portion represents the RATE OF NATURAL INCREASE, or the excess of the Birth Rate over the Death Rate.

The BIRTH RATE is represented by the shaded portion PLUS the black portion.

The death rates are not corrected for age & sex distribution.

The birth rate is represented by the shaded portion  
 The birth rate over the death rate  
 The shaded portion represents the rate of natural increase  
 The black portion represents the death rate



BIRTH RATE, DEATH RATE AND RATE OF NATURAL INCREASE  
 Table 46.

**Table 43.**

Age and sex classification of new cases of tuberculosis attending the dispensary.

	Pulmonary.		Other Forms.		Suspicious cases.		Totals.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1—5.....	1	1	1	2	2	3	4	6
5—15....	7	4	12	9	40	37	59	50
15—25....	9	3	1	2	21	26	31	31
25—35....	27	10	1	2	15	19	43	31
35—45....	29	9	—	—	8	15	37	24
45—55....	4	5	—	—	6	2	10	7
55—65....	1	—	—	—	2	—	3	—
65 upwards	—	—	—	—	—	—	—	—
Totals ....	78	32	15	15	94	102	187	149

**Table 44.**

Number of attendances at the tuberculosis dispensary during 1917.

	Pulmonary.	Other forms	Suspicious cases.
Number of old cases attending on 31st Dec., 1916	231	102	—
Number of new cases during the year 1917	... 110	30	196
Number of attendances during the year .....	1824	497	537

**Table 47.**  
Statistics for St. Helens since 1873.

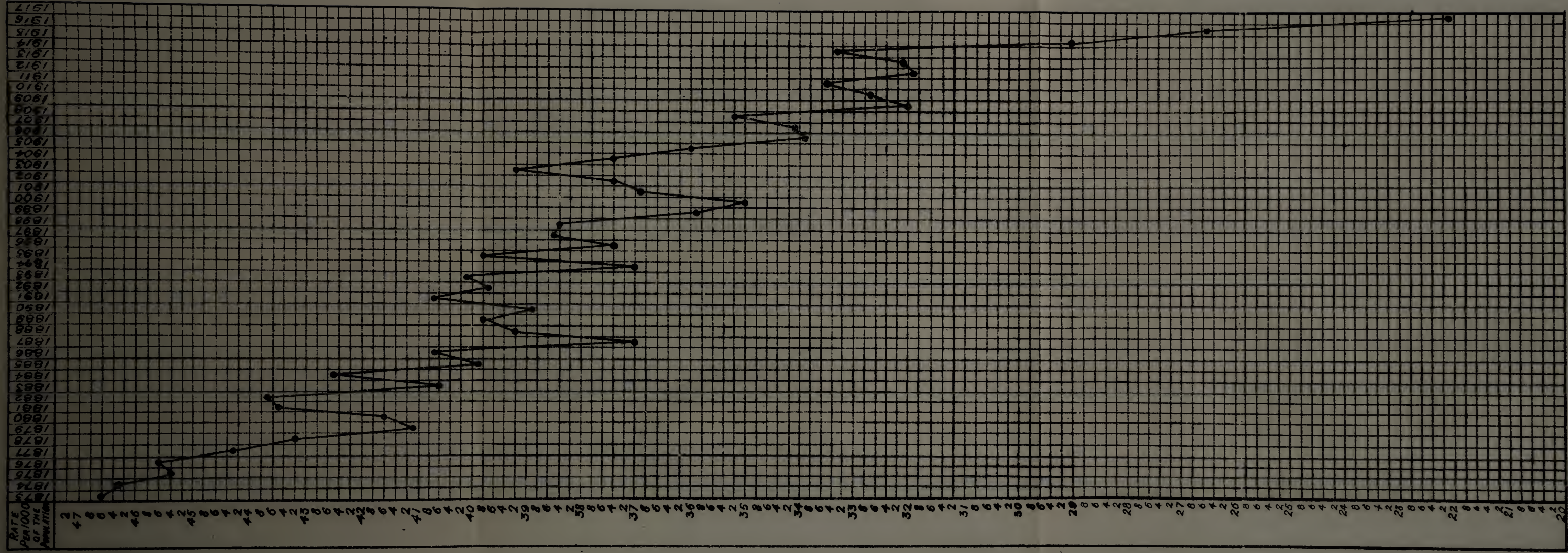
YEARS.	Population.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality Rate.	Rate of Persons Married.	DEATHS FROM							
							Small Pox.	Measles.	Scarlet Fever.	Typhoid Fever.	Typhus Fever.	Diarrhoea.	Whooping Cough.	Diphtheria.
1873	45,500	46.6	23.6	2.75	148	—	4	19	99	20	0	94	9	25
1874	46,188	46.3	31.4	5.03	198	—	0	29	238	19	0	110	41	26
1875	48,668	45.4	24.6	2.51	138	—	0	4	21	45	0	101	31	41
1876	52,246	45.6	23.2	3.20	149	—	0	101	21	42	0	94	7	30
1877	54,463	44.3	22.8	2.09	150	—	0	2	12	22	0	77	48	31
1878	57,534	43.2	23.9	3.09	165	—	0	4	22	35	0	135	15	74
1879	57,522	41.1	22.4	5.51	136	—	0	143	82	31	0	52	2	29
1880	58,807	41.6	20.0	2.92	169	—	0	0	27	32	0	131	71	8
1881	57,575	43.5	21.6	2.03	128	—	0	14	27	45	0	76	3	22
1882	58,903	43.7	25.4	4.95	180	—	0	205	35	24	0	85	36	38
1883	60,263	40.69	21.65	2.5	143	—	0	3	14	31	1	69	24	11
1884	61,584	42.50	24.16	5.3	173	—	0	131	16	33	2	131	9	11
1885	62,932	39.93	23.32	3.5	168	—	0	81	13	7	1	56	53	11
1886	64,311	40.70	22.46	5.2	172	—	0	102	34	28	0	122	41	10
1887	65,718	37.00	21.69	3.9	163	—	0	53	35	34	0	101	28	11
1888	67,158	39.20	19.80	3.1	151	—	0	38	11	22	0	65	61	21
1889	68,628	39.86	23.50	4.18	177	—	0	78	3	81	1	85	15	29
1890	70,132	38.90	25.43	5.3	170	—	0	19	181	24	1	74	68	13
1891	71,509	40.80	26.02	3.0	180	—	0	54	24	26	0	78	29	9
1892	72,399	40.2	21.0	2.64	147	—	1	23	18	25	0	84	31	12
1893	73,576	41.3	24.4	5.4	196	—	5	135	6	52	0	168	19	16
1894	*76,112	37.8	18.3	2.21	161	14.6	0	21	14	26	2	38	61	10
1895	77,288	40.9	21.8	3.10	181	13.0	1	54	9	59	0	101	14	8
1896	78,482	38.7	20.9	3.73	177	13.2	0	38	59	40	0	63	78	17
1897	79,694	40.0	21.8	4.3	181	14.2	0	87	44	33	0	133	33	20
1898	80,926	40.3	19.9	3.2	172	14.2	0	17	24	30	0	140	34	16
1899	82,176	38.3	20.4	2.9	157	13.0	0	21	8	43	0	114	41	15
1900	83,445	37.1	22.8	3.2	188	13.0	0	59	25	19	0	91	56	19
1901	84,734	36.9	19.7	2.56	175	13.9	0	7	29	34	0	95	17	3
1902	86,043	37.4	19.7	2.60	167	11.4	0	59	52	25	0	50	18	20
1903	87,372	39.1	17.5	1.72	138	13.0	0	1	26	18	0	53	30	23
1904	88,722	37.4	20.9	3.96	174	12.9	3	131	17	13	0	120	49	22
1905	89,843	36.05	17.2	1.88	132	11.7	0	41	16	2	0	66	26	18
1906	91,153	33.9	17.3	1.79	159	11.9	0	10	4	18	0	105	5	22
1907	92,476	34.1	18.3	2.87	155	13.6	0	145	10	12	0	36	52	11
1908	93,812	35.2	16.0	1.32	122	12.3	0	0	29	12	0	59	7	17
1909	95,161	32.0	18.5	3.5	149	12.7	0	188	33	13	0	27	62	12
1910	96,523	32.7	14.5	1.26	121	13.1	1	15	22	10	0	51	16	7
1911	96,870	33.5	18.3	3.03	158	12.7	0	69	13	22	0	143	39	8
1912	98,159	31.9	15.5	1.76	124	14.0	0	62	19	8	0	49	46	19
1913	99,460	32.1	18.9	3.74	155	14.6	0	189	26	4	0	120	18	15
1914	100,775	33.3	17.0	1.62	138	14.1	0	25	5	4	0	98	24	8
1915	92,240	32.1	19.3	3.1	129	16.1	0	126	12	6	0	78	40	32
	††													
1916	90,000	26.5	16.8	1.95	108	14.9	0	2	30	2	0	64	34	85
1917	90,600	22.0	16.53	2.26	114	10.60	0	61	20	2	0	29	15	78
	††													

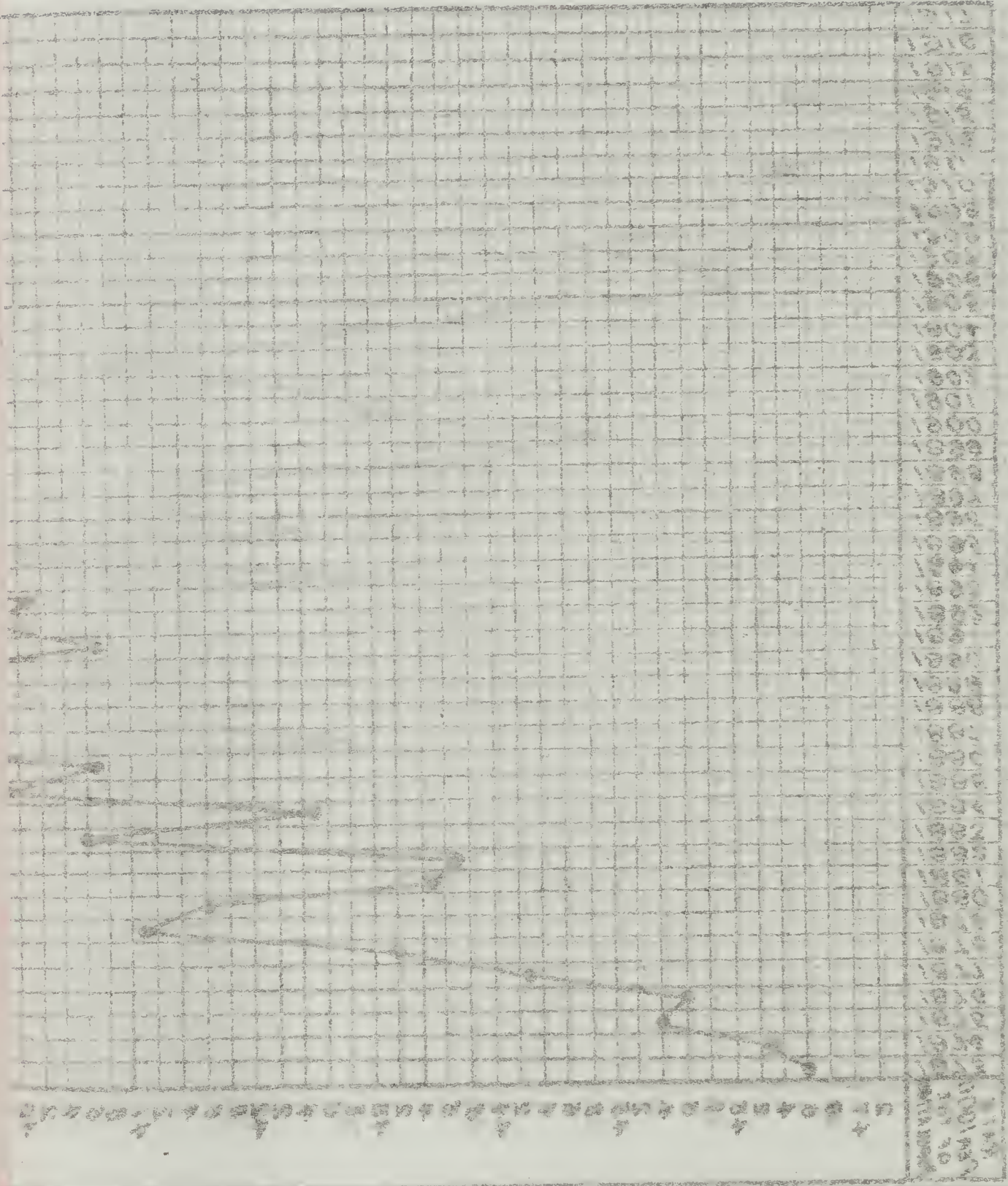
†† Estimated civil population

\*Borough extended.

BIRTH RATE — ST. HELENS, 1873-1917.

Table 48.





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**Table 49.**  
Birth-rates in the various wards.

WARDS.	Number of births notified.	Birth-rate per 1,000 estimated total pop'lation
North Eccleston .....	255	19.8
South Eccleston. ....	268	20.8
Central .....	160	26.2
North Windle .....	192	15.3
South Windle .....	186	22.3
Hardshaw .....	245	20.6
East Sutton .....	247	19.7
West Sutton .....	307	27.5
Parr .....	367	28.3

**Table 50.**  
Number of illegitimate births.

Years.....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
Number of illegitimate births ....	67	76	75	76	76	68	70	87	80	84	71	108	84	96	97	92	78	78
Proportion per 1,000 population	0.80	0.90	0.87	0.86	0.85	0.75	0.76	0.94	0.85	0.88	0.73	1.11	0.85	0.96	0.96	0.90	0.79	0.79

**Table 51.**  
Number of marriages.

Years.....	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
Number of marriages..	591	578	569	576	529	544	632	579	608	637	617	691	730	706	745	568	536
Marriage rate per 1,000 population..	13.94	11.42	13.02	12.98	11.76	11.93	13.6	12.3	12.7	13.1	12.7	14.09	14.6	14.01	14.5	11.58	10.60

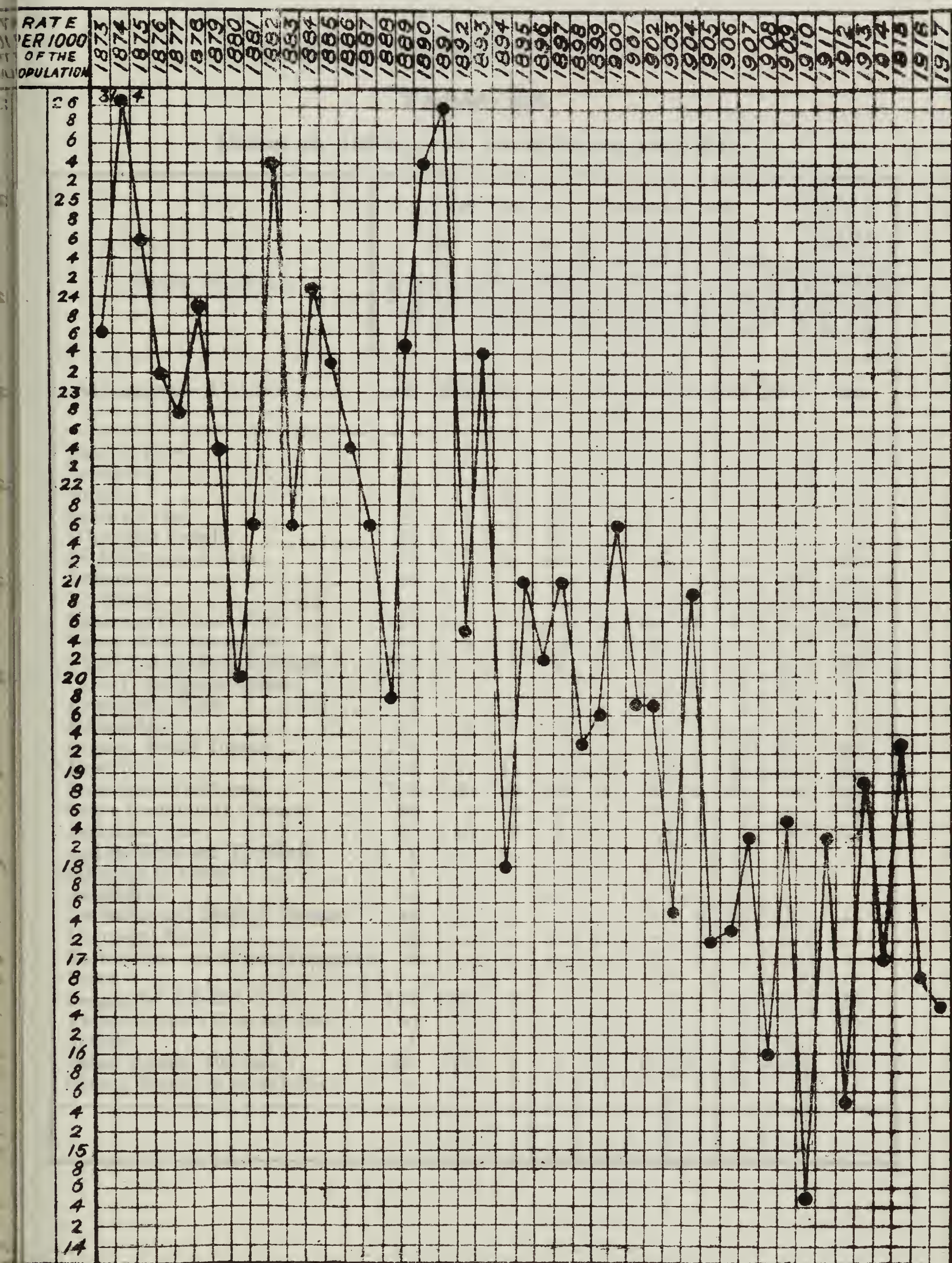
**Table 53.**

Death rates in the various wards.

WARDS.	Number of deaths	Death rate per 1000
North Eccleston .....	136	11.4
South Eccleston .....	140	11.7
Central .....	109	21.4
North Windle .....	147	12.7
South Windle .....	96	13.0
Hardshaw .....	168	15.1
East Sutton .....	163	14.1
West Sutton .....	133	13.5
Parr .....	179	15.0

Table 52.

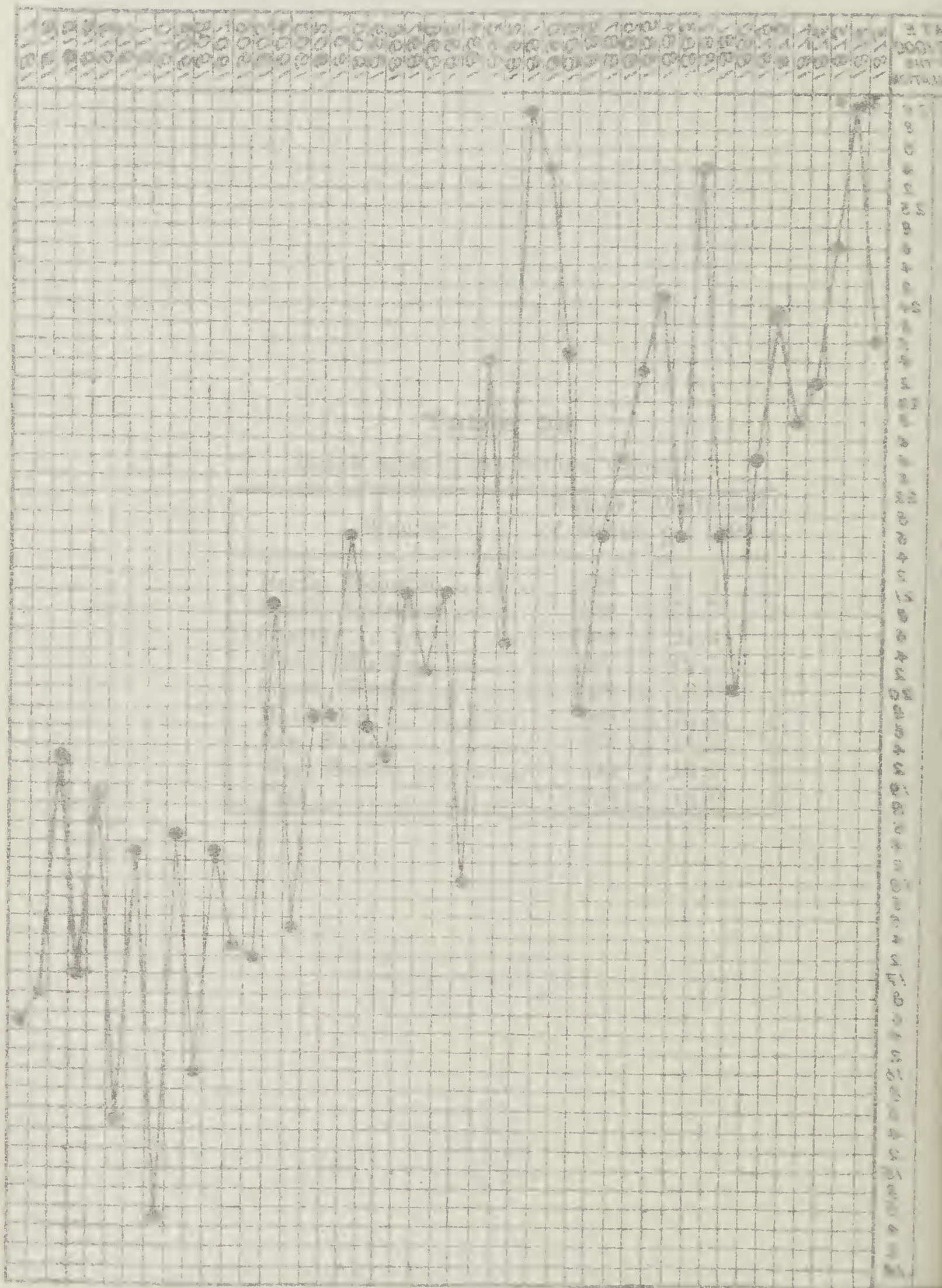
# DEATH RATE — ST. HELENS, 1873-1917.



The death rate is not corrected for age & sex distribution.

Table 53

# DEATH RATE - ST HELENS, 1872-1917



The death rate is not corrected for age & sex distribution

## LOCAL GOVERNMENT TABLE III.

**Table 54.**

Causes of, and ages at, death during year 1917.

CAUSES OF DEATH.	NETT DEATHS AT SUBJOINED AGES.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
<b>All causes—Certified.....</b>	1,524	279	124	158	110	70	173	224	286	436
Enteric Fever .....	2	—	—	—	—	1	—	1	—	2
Small-pox .....	—	—	—	—	—	—	—	—	—	—
Measles .....	65	11	26	22	6	—	—	—	—	6
Scarlet Fever .....	20	2	3	11	3	—	1	—	—	18
Whooping Cough.....	19	5	4	10	—	—	—	—	—	2
Diphtheria and Croup .....	79	3	12	42	21	1	—	—	—	70
Influenza .....	19	—	—	—	1	1	6	6	5	6
Erysipelas.....	2	1	—	—	—	—	—	—	1	1
Pulmonary Tuberculosis.....	121	—	—	—	13	18	60	27	3	21
Tuberculous Meningitis .....	16	1	1	5	6	3	—	—	—	3
Other Tuberculous Diseases ....	26	1	4	6	5	6	3	1	—	28
Cancer, malignant disease ....	70	—	—	—	—	—	11	37	22	8
Rheumatic Fever .....	3	—	—	1	—	—	—	1	1	1
Meningitis.....	17	3	5	4	3	1	1	—	—	1
Organic Heart Disease .....	123	—	—	2	2	—	8	54	57	24
Bronchitis.....	159	23	13	5	2	1	7	46	62	16
Pneumonia (all forms).....	170	39	29	28	14	9	18	24	9	29
Other Respiratory diseases ....	16	1	2	4	1	2	1	4	1	2
Diarrhœa, etc,.....	37	16	9	3	—	—	—	3	6	—
Appendicitis and Typhlitis ....	1	—	—	—	—	1	—	—	—	—
Cirrhosis of Liver .....	4	—	—	—	—	—	—	4	—	2
Alcoholism .....	—	—	—	—	—	—	—	—	—	—
Nephritis and Bright's Disease	49	—	2	1	5	2	9	20	10	45
Puerperal Fever .....	2	—	—	—	—	—	2	—	—	5
Parturition, apart from Puerperal Fever .....	8	—	—	—	—	3	5	—	—	—
Congenital debility, etc. ....	122	118	2	1	1	—	—	—	—	10
Violence, apart from suicide ....	60	3	1	7	12	9	8	14	6	26
Suicide .....	1	—	—	—	—	—	—	1	—	—
Other Defined Diseases .....	304	52	8	6	14	12	32	77	103	109
Causes ill-defined or unknown ..	9	—	3	—	1	—	1	4	—	1

**Table 55.**

Account of magisterial proceedings taken during 1917.

DATE.	MAGISTERIAL PROCEEDINGS.	RESULT.
Jan. 4th ...	Offences under Public Health Act, 1875, sec. 124, and St. Helens Corporation Act. Refusing to allow removal to hospital of a child suffering from ophthalmia neonatorum .....	Order of magistrates for compulsory removal to hospital.
Jan. 5th ...	Offence under Bye-law made under sec. 141 of the St. Helens Improvement Act, 1869. Permitting the occupation of two houses in respect of which a closing order had been made by the Local Authority....	Tenants ejected. Proceedings withdrawn.
Jan. 13th ..	Offence under St. Helens Corporation Act, sec. 93. Failing to provide proper accommodation for person suffering from dangerous infectious disorder.....	Order of Court of Summary Jurisdiction for removal and detention in hospital
Jan. 15th ..	Offence under Sale of Foods and Drugs Act, 1875, sec. 6 Selling butter not of the nature, substance and quality demanded by the purchaser, namely margarine.... Offence under the Margarine Act, 1887, sec. 6. Selling Margarine without a printed wrapper .....	Dismissed.  Fined £2.
Feb. 1st ....	Offences under Public Health Act, 1875, sec. 124, and St. Helens Corporation Act, Failing to provide proper accommodation for person suffering from dangerous infectious disorder .....	Order of magistrates for compulsory removal to hospital.
March	Offence under Quarry (Fencing) Act, 1889, and Public Health Act, 1875. Failure to comply with notices to fence dangerous quarry .....	Withdrawn on payment of costs.
March	Offence under nuisance sections of Public Health Act, 1875. Failure to comply with notices to remedy various defects in a dwelling house.....	Withdrawn on payment of costs.
April 28th ..	Two offences under Public Health Act, 1875, sec. 124, and St. Helens Corporation Act. Failing to provide proper lodging for children suffering from scarlatina .....	Order of magistrates for compulsory removal to hospital in each case.
May 7th ...	Offence under Sale of Food and Drugs Act, 1875, sec. 9. Sale of milk deficient in fat to the extent of 6%.....	Case withdrawn, defendant having joined the army.
June 4th ...	Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of milk containing 10% added water .....	Fined £3 and costs.

**Table 55** (*contd.*)

Account of magisterial proceedings taken during 1917.

DATE.	MAGISTERIAL PROCEEDINGS.	RESULT.
June 11th ..	Offence under Sale of Food and Drugs Act, 1875, sec. 9. Sale of milk deficient in fat to the extent of 3%.....	Dismissed on payment of n costs.
June 11th ..	Offence under Sale of Food and Drugs Act, 1875, sec. 9. Sale of milk deficient in fat to the extent of 2%.....	Dismissed on payment of costs.
June 18th ..	Offences under Sale of Food and Drugs Act, 1875, sec. 9. Sale of three samples of milk deficient in fat to the extent of 12%, 8%, and 5% respectively.....	Dismissed on payment of costs.
„	Offences under Sale of Food and Drugs Act, 1875, sec. 9. Sale of milk deficient in fat to the extent of 11%.....	Dismissed on payment of costs.
„	Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of milk containing 3% added water .....	Dismissed on payment of costs.
July 6th ...	Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of Yorkshire Pudding Powder containing 15.3% Calcium Sulphate .....	Fined £10.
July 6th ...	Offence under St. Helens Measles Regulations and Public Health Act, 1875, sec. 124. Failure to notify case of measles and failure to take proper precautions for preventing the spread of infectious disease.....	Fined 10/- or seven days.
July 22nd ..	Offence under Sale of Food and Drugs Act, 1875, sec. 9. Sale of milk deficient in fat to the extent of 11%.....	Dismissed on payment of costs.
Oct. 6th ...	Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of Baking Powder containing 28.5% Calcium Sulphate....	Fined £1.
Oct. 15th ..	Offence under Public Health Act, 1875. Unsound food sections. Exposing Unsound fruit for sale.....	Fined £1.
Nov. 19th ..	Offence under Sale of Food and Drugs Act, 1875, sec. 9. Sale of milk containing 4% added water .....	Fined £2.
Dec. 10th ..	Sale of Food and Drugs Act, 1875, sec. 6. Sale of Bread Improver powder containing 18.45% Magnesium Sulphate crystals .....	Fined £2.

Table 56.

The wards of the borough in which dwelling houses have been erected during the years mentioned.

Year.	North Eccleston	South Eccleston	Central	North Windle	South Windle	Hardshaw	East Sutton	West Sutton	Parr	Total
1904	105	53	7	37	18	47	59	1	70	395
1905	19	93	1	44	16	90	42	10	54	366
1906	11	51	—	31	13	31	73	24	39	260
1907	22	38	—	26	—	22	77	3	29	219
1908	2	52	—	4	2	27	22	—	20	127
1909	—	36	—	10	—	10	6	3	10	75
1910	2	31	—	10	—	24	18	—	25	110
1911	14	20	—	—	—	30	75	26	12	177
1912	35	28	—	4	—	26	28	58	1	180
1913	10	31	—	—	3	19	14	99	6	182
1914	10	42	—	9	16	14	20	63	29	203
1915	6	9	0	26	1	2	8	25	27	104
1916	0	12	0	1	1	2	4	16	16	52
1917	—	—	—	—	—	—	—	9	—	9

Table 57.

Canal Boats Acts, 1877 & 1884.

Number of boats inspected during 1917	...	...	...	...	1
Number of persons housed on board	...	...	...	...	2
Number of males housed on board	...	...	...	...	1
Number of females housed on board	...	...	...	...	1
Average number of persons per boat	...	...	...	...	2.0
Boats registered for five persons	...	...	...	...	0
Number of cases of infectious diseases on board the boats	...	...	...	...	Nil
Number of notices and letters sent	...	...	...	...	1
Number of boats without certificate or registered number	...	...	...	...	1
Number of boats with leakages and requiring painting	...	...	...	...	0
Unregistered boats	...	...	...	...	1

**SCHOOL  
HYGIENE.**

## PREFACE.

TO THE CHAIRMAN AND MEMBERS  
OF THE EDUCATION COMMITTEE.

LADIES AND GENTLEMEN,

I beg to submit the following report which deals with the work of medical inspection, following up and treatment of children attending the elementary and secondary schools in the borough, carried out during the year under the general direction of your medical officer.

For the first six months of 1917 there was systematic medical inspection of children coming within the three age groups specified by the Board of Education, and generally the work of the department was maintained in spite of the war. In July depletion of the medical staff necessitated the temporary suspension of systematic medical inspection in the schools. Arrangements were therefore made for an extension of the class to class examination by the nurses of all children attending school, and ailing and defective children thus discovered were referred for treatment.

Among 4025 children medically examined at the elementary schools 1021 defects were found requiring immediate attention; in addition 2470 defects were discovered mainly by the nurses. 2090 received medical treatment at the school clinic; 1401 from other sources.

A dental inspection of 9128 children was carried out, 4696 were found in need of treatment, and 2552 were treated at the dental clinic.

In my report for the year 1915, I expressed the opinion that the sanitary condition of many of the schools was unsatisfactory, of some deplorably bad; the schoolroom should, particularly as regards cleanliness, light and ventilation set a high standard for the home, the office and the shop.

Secondly more time should be given to the teaching of hygiene, temperance and physical exercise, the senior girls should receive regular instruction in infant management by a fully trained nurse.

Thirdly the washing of the face and hands should become part of the school routine, and a weekly bath should be taken on school premises, by each child.

Fourthly, special schools were urgently needed to deal with children physically and mentally abnormal. I am convinced that these matters should receive the earnest consideration of the Committee.

I have pleasure in acknowledging the cordial co-operation of the Secretary for Education.

I am, Ladies and Gentlemen,

Your obedient servant,

JOSEPH CATES.

*July, 1918.*

### MEDICAL INSPECTION.

At the beginning of 1917 there were in the borough under the control of the Education Committee 38 schools with 83 departments. Seven were provided schools, and 31 non-provided. There was accommodation for 23,747 children, 20,255 being on the roll, with an average attendance of 17,358.

At the end of the year the number on the roll was 20,097, and the average attendance 15,235.

The number of children under five years of age attending school in December was 867.

About 10 per cent. of the parents accepted the invitation to be present at the examination of their children.

The following visits were made during the year :—

By the school medical officers—

To schools and departments ..... 121

To the homes of children ..... 360

By the school nurses—

To schools and departments.....1,764

To the homes of children .....33,257

As required by the Board of Education three groups of children have been examined, namely, those entering school, those eight years of age, those twelve years of age, and also a number of special cases.

A classification of children examined is set out in table 1, on page .

The name of every child suffering from a defect of sufficient importance to be brought to the notice of the parents, is entered on a special card and filed for following up and re-examination. If, at the time of medical inspection, the case appears suitable for immediate attention at the clinic, steps are taken to provide the necessary treatment. Every case is followed up by the nurses of the medical officer's staff, who encourage the parents to obtain medical advice or arrange for attendance at the clinic. After treatment a re-examination is made by the school medical officers on the occasion of their next visit to the school attended by the child.

Table 2 shows the number of serious defects found in systematic and special examinations, and brought to the notice of the parents.

On re-visiting a school, children found defective at the previous visit, including those suffering from decayed teeth and unclean heads, are re-examined.

Table 3 gives a return of exceptional children in the area.

The children examined were not weighed and measured during the year 1917.

### INSPECTION CLINIC.

An inspection clinic is held in the medical officer's department at the Town Hall. The work of the inspection clinic is growing to such an extent that the necessity of providing further accommodation is urgent. Children attend for examination on Wednesdays, from 10-0 to 12-0, on Saturdays from 9-0 to 11, and at other times by arrangement. Much overcrowding occurs, but it is attempted to prevent this by giving a specified time for the attendance of certain children. This however does not obviate the necessity of a large airy waiting room, since school teachers, attendance officers and parents, knowing that the clinic is open at stated periods, send up children concerning whose condition they wish for information.

During 1917, 1,048 children were seen at the clinic, a total of 2,905 attendances being made.

Table 8 shows the conditions from which the children were suffering.

Of the children, 5·6 per cent were not receiving medical attention.

### THE TREATMENT CLINIC.

The Clinic is situated in Cloughton Street. The diseases treated are those affecting the eyes, ears, nose and throat, and teeth ; ringworm of the scalp by means of X-rays and also minor ailments.

The treatment of the children at the clinic is generally carried out by private practitioners appointed by the Local Authority. There is a whole time school dentist. Minor ailments, however, are treated by nurses acting under the directions of the school medical officer. The supervision of the medical, surgical and dental work done at the clinic is in the hands of the school medical officer who is directly responsible to the Committee. The medical practitioners are part-time officers, each attending at the clinic for one half-day-per week.

A fee not exceeding two shillings is recovered from parents found on enquiry able to pay for treatment. Children obviously necessitous are sent direct to the clinic so that there may be little delay.

During the year under consideration, the number of cases dealt with is given in table 6.

Table 7 shows the nature and extent of the dental treatment.

### FOLLOWING UP AND RE-EXAMINATION.

The following up of children discovered at the time of medical inspection to be suffering from diseases or defect is entirely carried out by nurses in the medical officer's department and the re-examination of the cases treated is performed by the assistant medical officers. The various duties usually performed by the health visitors and school nurses are so allocated that by placing each nurse in charge of a district a considerable amount of overlapping is avoided and the saving of time thus effected allows a more comprehensive system of after-care to be adopted.

The following table shows the rapid extension which has taken place since 1913 in the work of home visitation of defects.

YEAR.	1910	1911	1912	1913	1914	1915	1916	1917
Number of home visits by nurses to follow up cases of defect or disease .....	2,409	3,248	2,737	4,548	7,363	12,255	12,299	33,257

During 1917, 1,562 children were re-examined in school by the medical officers, the defects of 1,432 were found to have been remedied, 53 improved, 18 were unchanged, and 59 were untreated.

### ACTION TO DETECT AND PREVENT THE SPREAD OF INFECTIOUS DISEASE.

The steps taken to detect and prevent the spread of infectious diseases are materially the same as those described in the annual report for the year 1914 and need not now be re-stated.

No school or department was closed during 1917 on account of infectious disease.

Children excluded from school by the medical officer are not permitted to return until a re-admission notice has been issued by him.

### SUMMARY OF TREATMENT.

Table 4b gives a summary of treatment of the defects found in children systematically examined, and table 4a refers to defects found in class to class examination.

### ADMINISTRATION OF THE PROVISION OF MEALS ACT.

The provisions of this Act and also those of the Acts relating to medical inspection and treatment are administered by the central children's care Committee. Necessitous cases are reported to the district care committees by head teachers and others. Inquiries are then made concerning the circumstances of the parents. If the children cannot be properly fed by the parents owing to unfavourable home conditions, they are supplied with meals at the School Feeding Centres.

Breakfasts and dinners are provided at three centres, namely, Windle Pilkington, Merton Bank, and Robins Lane Schools. The meals are prepared at the centres, and are served by paid attendants.

The total number of meals given during the year was 44,525.

The average total cost per meal is :—Breakfasts, 3·05 pence ; Dinners, 4·06 pence ; while the average cost per meal for food only is :—Breakfasts, 2·19 pence ; Dinners, 2·92 pence.

### AN ACCOUNT OF MISCELLANEOUS WORK.

At the request of the Education Committee, 80 scholarship candidates were medically examined, and under regulations made by the committee and relating to teachers absent from duty, medical certificates were granted on 16 occasions.

Seven hundred and eleven children, on whose behalf application had been made for exemption from attendance at school, were examined with respect to their physical fitness to undertake employment ; in 505 instances no cause of rejection was discovered, and in 206 cases the children were found to be suffering from a defect requiring treatment.

The clerical work arising out of medical inspection and treatment is of necessity very heavy. During 1917, 9,659 exclusion notices, 6,828 re-admission notices, 822 preliminary notices, 31 final notices, 4,696 dental

notices, 3,467 miscellaneous notices and several thousands of letters were sent out from the medical officer's department.

TEACHING OF HYGIENE AND TEMPERANCE.

No general scheme for the teaching of these subjects has been adopted in the borough. In some of the schools, however, the work is performed by individual teachers. Physical and breathing exercises are carried out in each school. No arrangements have yet been made for open-air schools, school camps, or similar institutions.

ACCOUNT OF CHILDREN MENTALLY AND PHYSICALLY DEFECTIVE.

Table 3 gives a summary of children mentally or physically defective. No further action was taken during the year as regards these classes of children.

COWLEY SECONDARY SCHOOLS.

In 1915 arrangements were made for a routine annual inspection of scholars attending the Cowley Secondary Schools. Owing to the war the medical inspection was not carried out during 1917.

Table I.

Number of Children inspected 1st January, 1917, to 31st December, 1917.

AGE.	ENTRANTS.					INTER-MEDIATES.	LEAVERS.			TOTAL.
	4	5	6	Other ages	Total.	8	12	13	Total.	
Boys .....	180	409	96	17	702	649	635	15	1,299	2,001
Girls .....	153	413	69	12	647	666	686	25	1,377	2,024
	333	822	165	29	1349	1315	1,321	40	2,676	4,025

Special Cases Boys, 164    Girls, 147 Intermediate other than 8 years— Boys, 17.    Girls, 12.	Re-examination .....1,562
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Table 2.

Return of defects found in the course of medical inspection in 1917.

Defect or Disease.		CODE GROUPS.		SPECIALS.	
		Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.
		(2)	(3)	(4)	(5)
SKIN	Malnutrition .....	2	2	..	..
	Uncleanliness—				
	Head .....	83	..	..	1
	Body .....	68	..	..	..
SKIN	{ Ringworm—				
	Head .....	..	..	..	..
	Body .....	1	..	..	..
	{ Scabies .....	1	..	..	..
	{ Impetigo .....	8	34	..	..
	{ Other Disease .....	..	9	..	..
EYE	{ Defective Vision and Squint.....	334	..	70	72
	{ External Eye Disease .....	7	..	2	1
EAR	{ Defective Hearing.....	6	..	6	3
	{ Ear Disease .....	9	..	4	11
TEETH	Dental Disease .....	..	..	4	..
NOSE AND THROAT	{ Enlarged Tonsils .....	197	..	4	4
	{ Adenoids.....	6	..	8	11
	{ Enlarged Tonsils and Adenoids .....	49	..	2	..
	{ Defective Speech.....	..	14	1	7
HEART AND CIRCULA- TION	{ Heart Disease .....	..	..	..	..
	Organic .....	..	3	1	..
	Functional .....	..	..	..	..
	{ Anæmia .....	..	37	..	..
LUNGS	{ Pulmonary Tuberculosis .....				
	Definite .....	..	..	..	..
	Suspected .....	..	..	..	..
	{ Chronic Bronchitis .....	..	107	..	1
	{ Other Disease .....	..	4	..	..
NERVOUS SYSTEM	{ Epilepsy .....	..	..	..	..
	{ Chorea.....	..	..	..	..
	{ Other Disease .....	..	3	..	..
	Non-pulmonary Tuberculosis—				
	Glands.....	..	2	2	2
	Bones and Joints .....	..	..	..	..
	Other Forms .....	..	..	..	..
	Rickets .....	..	..	..	2
	Deformities .....	1	2	..	3
	Other Defects or Diseases .....	4	65	12	35

**Table 3.**

Numerical Return of all Exceptional Children in the Area in 1917.

			Boys	Girls	Total
BLIND. (including partially blind).		Attending Public Elementary Schools . . .	5	4	9
		Attending certified schools for the blind..	2	2	4
		Not at school .....	1	6	7
DEAF AND DUMB. (including partially deaf).		Attending Public Elementary Schools...	12	8	20
		Attending certified schools for the deaf	6	3	9
		Not at school .....	—	—	—
MENTALLY DEFICIENT.	Feeble Minded.	Attending Public Elementary Schools...	37	33	70
		Attending certified schools for mentally defective children .....	—	—	—
		Notified to the Local (Control) Authority during the year .....	—	—	—
		Not at school .....	—	1	1
	IMBECILES  IDIOTS.	At school .....	—	—	—
		Not at school .....	1	—	1
			1	1	2
EPILEPTICS.		Attending Public Elementary Schools...	6	5	11
		Attending certified schools for Epileptics..	—	—	—
		Not at School .....	3	5	8
PHYSICALLY DEFECTIVE.	Pulmonary Tuberculosis	Attending Public Elementary Schools. . .	27	31	58
		Attending certified schools for Physically Defective Children .....	—	—	—
		Not at school .....	12	20	32
	Other forms of Tuberculosis	Attending Public Elementary schools....	56	39	95
		Attending certified schools for Physically Defective children .....	—	—	—
		Not at school .....	11	11	22
	Cripples other than Tubercular	Attending Public Elementary Schools . . .	20	9	29
		Attending Certified schools for Physically Defective children .....	5	—	5
		Not at school .....	1	—	1
DULL OR BACKWARD*		Retarded 2 years .....	106	107	213
		Retarded 3 years .....	22	12	34

\* Judged according to age and standard.

**Table 4a.**

Treatment during 1917 of defects found in children at class to class inspection, the inspection clinic, and during home visits.

CONDITIONS.	No. of defects found for which Treatment was considered necessary.			No. of defects for which no report is available.	No. of defects treated.	Results of Treatment.			No. of defects not treated.	Per cent. of defects treated.
	From previous year	New Cases	Total			Remedied.	Improved.	Unchanged.		
Clothing .....	20	99	119	35	84	53	21	10	..	70.6
Footgear.....	1	20	21	4	17	10	6	1	..	80.9
Cleanliness of Head ...	123	1043	1166	216	943	339	576	28	7	80.9
Cleanliness of Body ...	22	36	58	14	44	15	21	8	..	75.8
Nutrition .....	..	..	..	..	..	..	..	..	..	..
Nose and Throat .....	5	100	105	3	95	94	..	1	7	90.5
External Eye disease .	10	142	152	..	152	117	32	3	..	100.0
Ear disease .....	22	53	75	4	70	24	27	19	1	82.4
Teeth.....	6	11	17	1	4	3	..	1	12	23.5
Heart and Circulation..	..	..	..	..	..	..	..	..	..	..
Lungs .....	..	2	2	..	2	2	..	..	..	100.0
Nervous System .....	..	..	..	..	..	..	..	..	..	..
Skin .....	23	632	655	10	644	497	131	16	1	98.3
Rickets .....	..	..	..	..	..	..	..	..	..	..
Deformities .....	..	..	..	..	..	..	..	..	..	..
Tuberculosis.....	..	..	..	..	..	..	..	..	..	..
„ Non Pulmonary ..	..	2	2	..	2	..	..	2	..	100.0
Speech.....	..	..	..	..	..	..	..	..	..	..
Mental Condition.....	..	..	..	..	..	..	..	..	..	..
Vision and Squint ....	23	167	190	12	176	125	38	13	2	92.6
Hearing.....	1	6	7	..	7	5	..	2	..	100.0
Miscellaneous .....	6	157	163	3	159	128	31	..	1	97.6
TOTAL .....	262	2,470	2,732	302	2,399	1,412	883	104	31	87.7

**Table 4b.**

Treatment of Defects during 1917 of children systematically examined.

CONDITIONS.	No. of defects found for which Treatment was considered necessary.			No. of defects for which no report is available.	No. of defects Treated.	Results of Treatment.			No. of defects not treated.	Per cent. of defects treated.
	From previous year.	New Cases	Total			Remedied.	Improved.	Unchanged.		
Clothing .....	43	73	116	30	86	57	20	9	..	72.4
Footgear.....	20	63	83	12	71	42	28	1	..	85.5
Cleanliness of Head ..	50	83	133	27	104	36	64	4	2	72.5
Cleanliness of Body ..	64	68	132	18	100	34	46	20	14	75.5
Nutrition .....	15	2	17	..	15	2	10	3	2	88.2
Nose and Throat ....	96	252	348	60	185	165	6	14	103	53.1
External eye disease .	4	7	11	3	8	5	3	..	..	72.7
Ear Disease .....	7	9	16	3	9	3	3	3	4	56.2
Teeth.....	56	107	163	41	74	67	3	4	48	45.4
Heart and Circulation	..	..	..	..	..	..	..	..	..	..
Lungs .....	1	..	1	1	..	..	..	..	..	..
Nervous System .....	..	..	..	..	..	..	..	..	..	..
Skin .....	..	2	2	1	..	..	..	..	1	..
Rickets .....	..	..	..	..	..	..	..	..	..	..
Deformities .....	..	..	..	..	..	..	..	..	..	..
Tuberculosis P'monary	2	..	2	2	..	..	..	..	..	..
„ Non-Pulmonary	1	..	1	1	..	..	1	..	..	..
Speech.....	..	..	..	..	..	..	..	..	..	..
Mental Condition ....	..	..	..	..	..	..	..	..	..	..
Vision and Squint ...	144	334	478	86	308	262	17	29	84	64.4
Hearing.....	2	6	8	3	5	3	1	1	..	62.5
Miscellaneous .....	4	14	18	3	14	12	2	..	1	77.7
	509	1,020	1,529	291	979	688	204	88	259	64.08

**Table 5.**

Inspection, Treatment, &amp;c. of Children during 1917.

(1) The total number of children medically inspected .....	4336
(2) The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment) .....	435
(3) The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.) .....	732
(4) The number of children in (3) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.).....	605

Table 6.

Classification of cases treated at the School Clinic during 1917.

	Treatment carried on from previous year.	New Cases.	Treatment completed.	Treatment not completed at the end of the year.
Eye defects .....	90	389	423	56
Nose and throat defects ....	11	233	244	..
Diseases of the teeth .....	..	2,552	2,552	..
Ringworm of scalp .....	13	39	40	12
Minor ailments .....	268	1,261	1383	146

Table 7.

Dental inspection and treatment.

AGES		Number inspected in schools		Number requiring treatment		Number treated at school clinic		Extraction		Anæsthetics		Fillings		Mis- cellaneous
		Boys	Girls	Boys	Girls	Boys	Girls	Tempor- ary	Per- manent	Local	Nitrous Oxide	Amalgam	Cement	Scalings & Dressings
5 and under	6..	740	624	524	404	247	248	1297	..	461	13	10	9	..
6	7..	747	780	454	424	226	224	1037	31	420	3	13	15	..
7	8..	978	986	504	476	219	261	1161	39	450	..	23	19	..
8	9..	1140	1041	521	427	284	204	1096	31	458	4	29	16	..
9	10..	908	824	482	310	261	105	993	79	336	1	17	16	..
10	11..	..	..	..	..	46	59	320	37	100	..	6	19	..
11	12..	..	..	..	..	32	27	101	81	50	..	7	19	..
12	13..	94	94	51	30	17	15	..	74	30	2	7	3	..
13	14..	106	66	49	40	42	31	..	168	72	1	79	98	..
14 upwards	.....	..	..	..	..	2	2	..	4	2	..	..	12	3
Totals .....		4,713	4,415	2,585	2,111	1,376	1,176	6,005	544	2,379	24	191	226	3

**Table 8.**

Classification of defects among children attending the inspection clinic.

<b>HEAD.</b>		<b>SPEECH.</b>	
Sores .....	4	Defective Speech .....	1
Other diseases .....	12		
<b>SKIN.</b>		<b>MENTAL CONDITIONS.</b>	
Ringworm, scalp .....	31	Mentally defective.....	0
Ringworm, body .....	27	Dull .....	0.
Scabies .....	220		
Impetigo .....	35	<b>HEART.</b>	
Sores .....	5	Anæmia .....	13
Psoriasis .....	2	Others .....	0
Eczema .....	1		
Other diseases .....	48	<b>LUNGS.</b>	
<b>THROAT AND NOSE DEFECTS.</b>		Bronchitis .....	94
Enlarged tonsils and		Suspected phthisis.....	0
adenoids .....		Other diseases .....	3
Enlarged tonsils.....	36		
Adenoids .....	6	<b>NERVOUS SYSTEM.</b>	
Other diseases .....	16	Epilepsy .....	1
		Chorea .....	12
<b>GLANDS.</b>		Paralysis .....	1
Enlarged .....	10	Others .....	4
Abscess .....	6		
<b>EYES.</b>		<b>TUBERCULOSIS.</b>	
Conjunctivitis .....	11	Phthisis .....	0
Blepharitis .....	2	Glands .....	1
Ulcers.....	2	Bones and joints .....	1
Squint .....	3	Skin .....	6
Defective vision .....	72		
Other diseases .....	10	RICKETS.....	1
<b>EARS.</b>		KIDNEY DISEASE.....	0
Discharge .....	11	GENERAL DEBILITY.....	65
Deafness .....	5	RHEUMATISM.....	12
Other diseases .....	11	OTHER DISEASES .....	248



